## Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

## Sacramento River Basin

ST0003	Overall LMA	Total LMA						
Sutter Maintenance Yard East Levee	Rating	Miles						
Sacramento River	Α	26.82						
Rated Item		Maintena	nce Deficiency		Enforcement		Design 8 Obsole	
realed item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee	0.06		0.06	0.220/		I	I	
Vegetation Trim / Thin Trees	0.06		0.06 0.01	0.22%				
Encroachments	0.01		0.01	0.60%	1.91	0.06		
Slope Stability	0.16		0.16	0.80%	1.91	0.06		
Supplemental	0.09		0.09	0.34%				
2017 USACE Erosion Survey, DRAFT	0.40		0.40	1.49%				
DWR UCIP Field Study					0.36	0.05		
DWR UCIP LMA Responsibility								
2017 Storm Damage	0.03		0.03	0.11%				
LMA Totals:	0.75	0.00	0.75	2.80%	2.27	0.11	0.00	0.00
Unit No. 01 Sacramento River LB	Overall Unit Rating	Total Unit Miles			1			
ST0003	Α	19.85						
		Maintena	nce Deficiency		Enforc	ement	Design & System Obsolescence	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	
Earthen Levee							<u> </u>	
Vegetation	0.03		0.03	0.15%				
Trim / Thin Trees	0.01		0.01	0.05%				
Encroachments	0.16		0.16	0.81%	1.31	0.06		
Slope Stability	0.09		0.09	0.45%				
Supplemental 2017 USACE Erosion Survey, DRAFT	0.40		0.40	2.02%				
DWR UCIP Field Study	0.40		0.40	2.02 /0	0.35	0.05		
DWR UCIP LMA Responsibility					0.00	0.00		
2017 Storm Damage	0.03		0.03	0.15%				
Unit Totals:	0.72	0.00	0.72	3.63%	1.66	0.11	0.00	0.00
					1			
Unit No. 02 Colusa Bypass RB	Overall Unit Rating	Total Unit Miles						
CTOOO	A	2.20						
ST0003			nas Dafiaianav		Cofore	ement	Design 8	k System
Rated Item	M Miles	U Miles	nce Deficiency M + 4U Miles	Threshold %			Obsole M Milos	
Earthen Levee	IVI IVIIICS	O IVIIIes	IVI + 40 IVIIIe3	Tillesiloid /6	IVI IVIIICS	O ivilles	IVI IVIIICS	O ivilles
Vegetation	0.01		0.01	0.46%				
Supplemental								
DWR UCIP Field Study					0.01			
Unit Totals:	0.01	0.00	0.01	0.46%	0.01	0.00	0.00	0.00
Unit No. 03 Colusa Bypass LB	Overall Unit Rating	Total Unit Miles						
ST0003	Α	2.29						
		Maintena	nce Deficiency		Enforc	ement	Design 8	System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	0.02		0.02	0.87%				
Unit Totals:	0.02	0.00	0.02	0.87%	0.00	0.00	0.00	0.00

## Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

## Sacramento River Basin (cont.)

Unit No. 04 Moulton Bypass RB	Overall Unit	Total Unit							
	Rating	Miles							
ST0003	A	0.30							
Rated Item		Maintenance Deficiency			Enforc	Enforcement		Design & System Obsolescence	
Rateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
No Items									
Unit Totals:	0.00	0.00	0.00	0.00%					
II '' NI OF MI I' DI I D	0 "11"	<b>T</b> ( 111 %							
Unit No. 05 Moulton Bypass LB	Overall Unit	Total Unit							
	Rating	Miles							
ST0003	Α	2.19							
Rated Item		Maintena	nce Deficiency		Enforc	ement		k System scence	
Nateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Encroachments					0.60				
Unit Totals:	0.00	0.00	0.00	0.00%	0.60	0.00	0.00	0.00	

Winter \*\*

#### Flood Control Project Maintenance Levee Inspections

## **LMA District Cover Sheet**

Fall 2018 Levee Inspection Results

## **Sutter Maintenance Yard East Levee Sacramento River**

Summer \*\*

Spring

	(March - May)	(June - August)	(September - November)	(December - February)					
† Overall LMA Rating (Fall Only)			A						
	** Non-receipt of Summ Reports may effect or								
	d using the same criter	ria in the spring and i	n the fall.						
	<u>FALL INSPECTIONS:</u> The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.								
Comments									

## **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento River	Left	19.85

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	4/19/2018 - 4/19/2018		10/10/2018 - 10/10/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Bryan Reniff Sutter Maintenance Yard		Bryan Reniff Sutter Maintenance Yard	

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.00	Rating **	Α	Issue No.		10	
LM End	0.00	Issue Type +	Ma	Location *	N/A		
Category	Earthen Levee			GPS Latitude/Longitude			
Category			Start		End		
Item	Operations & Maintenance			39.1940	83°	39.194083°	
пеш	Manuals	Manuals			12°	2° -121.935512°	
DWR ID	DWR_ST0	003_01_f _ 201	6_10				
		Comn	nent Coo	de			
		Inspecto	or Comm	nent			
LMA has C	LMA has O+M manual.						

No Photos

Issue No. Rating \*\* Α 0.00 15 LM Start 0.00 Issue Type + Ма Location \* N/A LM End Earthen Levee GPS Latitude/Longitude Category Start End Emergency Supplies & 39.194083° 39.194083° Item Equipment -121.935512 ° -121.935512° DWR\_ST0003\_01\_f \_ 2016\_15 DWR ID Comment Code

No Photos

Inspector Comment

LMA has a stockpile of supplies.

LM Start	0.00	Rating **	Α	Issue No.		16	
LM End	0.00	Issue Type +	Ма	Location *		N/A	
Category	Earthen L	evee		GPS Latitude/Longitude			
Category				Start		End	
Item	Flood Preparedness & Training			39.1940	33°	39.194083°	
item			-121.9355	12°	-121.935512 °		
DWR ID	DWR_ST0	003_01_f _ 2016	5_16				
	Comment Code						

No Photos

Inspector Comment

The LMA attends annual training and maintains emergency response plans.

\*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiency

M : Minimally Acceptable C : Corrected

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.11	Rating **	М	Issue No.		130	
LM End	0.14	Issue Type +	Ма	Location *		WS	
Category	Earthen Levee			GPS La	atitud	e/Longitude	
Calegory			Start		End		
Slope Stability				39.1951	63°	39.195038°	
пеш			-121.936815 °		-121.937435°		
DWR ID	DWR_ST00	DWR_ST0003_01_s _ 2017_130					
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comn	nent			
Repair the	erosion al	ong the water	side slo	pe.			

Photo 1 of 1 : FA\_2018\_ST0003\_264\_130\_20180905\_00030.jpg



View of the erosion along the waterside slope.

LM Start	0.15	Rating **	U	Issue No.		3		
LM End	0.20	Issue Type +	En	Location *	WS			
Category	Earthen L	GPS La	GPS Latitude/Longitude					
Category			Start		End			
Item	Encroachi	ncroachments			78°	39.195022°		
пеш			-121.937502°		-121.938563°			
DWR ID	DWR_ST00	003_01_s _ 201	2_3					
		Comn	nent Cod	de				
BU : Buildi	ng							
		Inspecto	or Comm	nent				

Photo 1 of 1: FA\_2018\_ST0003\_264\_3\_20180905\_00003.jpg



View of the trailers and building on the waterside.

LM Start	0.24	Rating **	М	Issue No.		82		
LM End	0.24	Issue Type +	Ма	Location *		WS		
Category	, Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Slope Stability			39.1952	34°	39.195234	0	
item		-121.9391	24°	-121.939124	0			
DWR ID	DWR_ST0003_01_f _ 2016_82							
Comment Code								
S3 : Repair the levee slope damaged by vehicle traffic and prevent								

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

access where possible.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.42	Rating **	М	Issue No.		81	
	<b></b>						
LM End	0.42	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Category	y			Start		End	
Item	Slope Stability			39.1964	83°	39.196483°	
пеш				-121.942228 °		-121.942228°	
DWR ID	DWR_ST00	003_01_f _ 2016	6_81				
		Comn	nent Cod	de			
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.							
	Inspector Comment						



View of the ruts along the waterside slope.

Photo 1 of 3: UCIP\_FA\_2018\_51650\_46962.jpg

LM Start	0.51	Rating **	A/W	Issue No.		137	
LM End	0.51	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.1970	28°	39.197028°	
item				-121.9435	97°	-121.943597°	
DWR ID	17307						
Comment Code							

# Inspector Comment

FS\_ID:51650 DS\_ID:17307 EP\_NO: 9534

Repair Type: No Action Needed

Crossing Status: Found UCIP Comments: 10/27/2017 This structure is inspected annually under

the Structure and Channel Summer Inspection (part of the Levee Inspection Program) conducted by the DWR Flood Project Integrity and Inspection Branch (FPIIB). (DWR UCIP - O. Magana) 4/24/2017 Both sides of crossing were underwater during site visit. Will need to revisit after water levels drop. (DWR Sutter Yard-AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/6/2016 Crossing appears to be in good condition.4/6/2015 Good Condition. No issues. Semi circle CMP half riser in inlet structure on LS. Inlet opeing has no trash rack, this may cause safety issue.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD\_STRUCT\_DESC: [Butte Slough Drainage Structure] 78-inch drainage pipe of an unknown material through the levee, 3 feet below the crown. Flap gate on the waterside (WS). Corrugated metal pipe (CMP) half riser (in a semi-circle configuration) in the inlet structure on the landside (LS). (78-inch pipe [HLM 0.44] authorized under Automatic Board Order (ABO) issued as Permit No. 9534, 1974 - Caleta). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 0.44)].

Waterside view: overview towards CMP sewer pipe

FS Date: 4/26/2017 9:46:51 AM

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.51	Rating **	A/W	Issue No.		137 (cont)
LM End	0.51	Issue Type +	Ма	Location *		
Supplemental Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
ltom	Item DWR UCIP LMA Responsibility			39.19702	3°	39.197028°
пеш				-121.94359	7 °	-121.943597°
DWR ID	17307					

# Inspector Comment

Comment Code

FS\_ID:51650 DS\_ID:17307 EP\_NO: 9534

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 10/27/2017 This structure is inspected annually under the Structure and Channel Summer Inspection (part of the Levee Inspection Program) conducted by the DWR Flood Project Integrity and

Inspection Branch (FPIIB). (DWR UCIP - O. Magana) 4/24/2017 Both sides of crossing were underwater during site visit. Will need to revisit after water levels drop. (DWR Sutter Yard-AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/6/2016 Crossing appears to be in good condition.4/6/2015 Good Condition. No issues. Semi circle CMP half riser in inlet structure on LS. Inlet opeing has no trash rack, this may cause safety issue.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD STRUCT DESC: [Butte Slough Drainage Structure] 78-inch drainage pipe of an unknown material through the levee, 3 feet below the crown. Flap gate on the waterside (WS). Corrugated metal pipe (CMP) half riser (in a semi-circle configuration) in the inlet structure on the landside (LS). (78-inch pipe [HLM 0.44] authorized under Automatic Board Order (ABO) issued as Permit No. 9534, 1974 - Caleta). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 0.44)]. FS Date: 4/26/2017 9:46:51 AM

LM Start	0.51	Rating **	A/W	Issue No.	137 (cont)
LM End	0.51	Issue Type +	Ma	Location *	

Photo 2 of 3: UCIP\_FA\_2018\_51650\_46960.jpg



Waterside view: water flowing from CMP sewer pipe

Photo 3 of 3: UCIP\_FA\_2018\_51650\_46961.jpg



Landside view: overview

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Not Applicable M: Not Inspected/Rated M: Minimally Acceptable D: C: Corrected Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.54	Rating **	М	Issue No.		9	
LM End	0.68	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachments				67°	39.198178°	
пеш			-121.944232 °		-121.946412°		
DWR ID DWR_ST0003_01_s _ 2017_9							
		Comn	nent Cod	de			
DE : Debri	S						
		Inspecto	or Comm	nent			
Remove the debris from the waterside slope.							

Photo 1 of 1 : FA_2018_	ST0003_264_9_20	180905_00007.jpg
		SECTION.
		<b>学</b>
	NAME	03/22/2017

View of the debris along the waterside slope.

LM Start	0.74	Rating **	М	Issue No.		93		
LM End	0.74	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Encroachments				39.1983	10°	39.198310°		
Item				-121.9474	63°	-121.947463°		
DWR ID DWR_ST0003_01_f _ 2018_93								

## Comment Code

DE: Debris

## Inspector Comment

Remove the prunings the landside slope and toe.

## Photo 1 of 1: FA\_2018\_ST0003\_264\_93\_20181105\_00185.jpg



View of the prunings along the landside slope and toe.

LM Start	1.17	Rating **	М	Issue No.		80			
LM End	1.17	Issue Type +	Ма	Location *	WS				
Category Earthen Levee				GPS Latitude/Longitude					
				Start		End			
Itom	Slope Sta	bility		39.1941	26°	39.194126°			
пеш	Item				45 °	-121.953345 °			
DWR ID DWR_ST0003_01_f _ 2016_80									
	Comment Code								

S1: Repair slope instability.

Inspector Comment



View of the slope instability along the waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.17	Rating **	U	Issue No.		Issue No.		Issue No.		Issue No.		138
LM End	1.17	Issue Type +	En	Location *								
Supplemental				GPS Latitude/Longitude								
Category						End						
Itom	DWR UCIP Field Study			39.1941	06°	39.194106°						
Item			-121.953512°		-121.953512°							
DWR ID	17319					·						

#### Inspector Comment

Comment Code

FS ID:53399 DS ID:17319 EP NO: 9527 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation completely overgrown towards walkway and pump so could not inspect. WS pipe end is nearly completely covered in debris, pipe cap appears either open or broken, LS erosion still present, and pipe end completely covered in debris so crossing remains Urgent (D. Sanoski - DWR UCIP).4/24/2017 LS slope damage is still present. No repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No LS repairs have been made yet. (DWR Sutter Yard- AFreitag)6/6/2016 New flow meter installed on WS. Walkway to access the pump is overgrown with vegetation and not accessible. (DWR Sutter Yard - afreitag) 4/5/2016 Caved-in slope on landside (LS) not yet repaired. Leaky pipe marker gone. Per Bob Duffey (DWR FPIIB inspector), pipe will be replaced by owner next year. If not, will go to CVFPB enforcement, (DWR UCIP kfazel)4/6/2015 Pipe leaks during times of High water. Slope damage still present. Needs a more detailed inspection to find the leak. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Pipe does not appear to be abandoned. On the WS it appears that a smaller pipe was sleeved into the 18in. Pipe and then the difference capped and welded. Pump was not running at time of inspection but LS ditch near outlet was wet. LS slope damage and leaky pipe marker are still present. (DWR Sutter Yard - afreitag)12/13/2012 Abandoned and plugged/capped steel pipe on WS berm. DWR leaky pipe marker on LS (12-3). Slope failure on LS. Needs capping of LS steel pipe after detailed investigation. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through the levee, 12.5 feet below the crown. Gate valve on the waterside (WS). Vertical pump on the WS bank. Flow meter on the WS. (Automatic Board Order (ABO) issued as Permit No. 9527, 1974 - Butte Creek Farms) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 1.1)].

FS Date: 8/30/2018 12:42:00 PM



Waterside view: overview

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.17	Rating **	U	Issue No.	138 (cont)			
LM End	1.17	Issue Type +	En	Location *				
Category			GPS Latitude/Longitude					
Category	alegory			Start		End		
Item	DWR UC	IP Field Study		39.19410	)6°	39.194106°		
пеш				-121.953512°		-121.953512°		
DWR ID	17319							
	Comment Code							

#### Inspector Comment

FS\_ID:53399 DS\_ID:17319 EP\_NO: 9527 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation completely overgrown towards walkway and pump so could not inspect. WS pipe end is nearly completely covered in debris, pipe cap appears either open or broken, LS erosion still present, and pipe end completely covered in debris so crossing remains Urgent (D. Sanoski - DWR UCIP).4/24/2017 LS slope damage is still present. No repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No LS repairs have been made yet. (DWR Sutter Yard- AFreitag)6/6/2016 New flow meter installed on WS. Walkway to access the pump is overgrown with vegetation and not accessible. (DWR Sutter Yard - afreitag) 4/5/2016 Caved-in slope on landside (LS) not yet repaired. Leaky pipe marker gone. Per Bob Duffey (DWR FPIIB inspector), pipe will be replaced by owner next year. If not, will go to CVFPB enforcement, (DWR UCIP kfazel)4/6/2015 Pipe leaks during times of High water. Slope damage still present. Needs a more detailed inspection to find the leak. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Pipe does not appear to be abandoned. On the WS it appears that a smaller pipe was sleeved into the 18in. Pipe and then the difference capped and welded. Pump was not running at time of inspection but LS ditch near outlet was wet. LS slope damage and leaky pipe marker are still present. (DWR Sutter Yard - afreitag)12/13/2012 Abandoned and plugged/capped steel pipe on WS berm. DWR leaky pipe marker on LS (12-3). Slope failure on LS. Needs capping of LS steel pipe after detailed investigation. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through the levee, 12.5 feet below the crown. Gate valve on the waterside (WS). Vertical pump on the WS bank. Flow meter on the WS. (Automatic Board Order (ABO) issued as Permit No. 9527, 1974 - Butte Creek Farms) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 1.1)].

FS Date: 8/30/2018 12:42:00 PM

#### Photo 2 of 3: UCIP\_FA\_2018\_53399\_46981.jpg



Waterside view: CMP riser with slide gate

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.17	Rating **	U	Issue No.		Issue No.		Issue No.		Issue No.		Issue No.		138 (cont)
LM End	1.17	Issue Type +	En	Location *										
Supplemental				GPS Latitude/Longitude										
Category						End								
Itom	DWR UCI	DWR UCIP Field Study			06°	39.194106°								
Item		-121.953512°		-121.953512°										
DWR ID	17319					·								

#### Inspector Comment

Comment Code

FS\_ID:53399 DS\_ID:17319 EP\_NO: 9527 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation completely overgrown towards walkway and pump so could not inspect. WS pipe end is nearly completely covered in debris, pipe cap appears either open or broken, LS erosion still present, and pipe end completely covered in debris so crossing remains Urgent (D. Sanoski - DWR UCIP).4/24/2017 LS slope damage is still present. No repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No LS repairs have been made yet. (DWR Sutter Yard- AFreitag)6/6/2016 New flow meter installed on WS. Walkway to access the pump is overgrown with vegetation and not accessible. (DWR Sutter Yard - afreitag) 4/5/2016 Caved-in slope on landside (LS) not yet repaired. Leaky pipe marker gone. Per Bob Duffey (DWR FPIIB inspector), pipe will be replaced by owner next year. If not, will go to CVFPB enforcement, (DWR UCIP kfazel)4/6/2015 Pipe leaks during times of High water. Slope damage still present. Needs a more detailed inspection to find the leak. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Pipe does not appear to be abandoned. On the WS it appears that a smaller pipe was sleeved into the 18in. Pipe and then the difference capped and welded. Pump was not running at time of inspection but LS ditch near outlet was wet. LS slope damage and leaky pipe marker are still present. (DWR Sutter Yard - afreitag)12/13/2012 Abandoned and plugged/capped steel pipe on WS berm. DWR leaky pipe marker on LS (12-3). Slope failure on LS. Needs capping of LS steel pipe after detailed investigation. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through the levee, 12.5 feet below the crown. Gate valve on the waterside (WS). Vertical pump on the WS bank. Flow meter on the WS. (Automatic Board Order (ABO) issued as Permit No. 9527, 1974 - Butte Creek Farms) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 1.1)]. FS Date: 8/30/2018 12:42:00 PM

Photo 3 of 3: UCIP\_FA\_2018\_53399\_46980.jpg

Waterside view: inside CMP riser

## Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.44	Rating **	U	Issue No.		139	
LM End	1.44	Issue Type +	Ma	Location *			
Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.192502°		39.192502°	
пеш				-121.958062 °		-121.958062°	
DWR ID	17320				·		
Comment Code							

#### Inspector Comment

FS ID:53400 DS ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation too thick to clearly inspect WS pipe so assume same condition as last inspections so crossing remains Urgent due to pipe integrity. WS levee slope looks good. No signs of levee threat to the road crown. LS headwall looks in good condition (D. Sanoski - DWR UCIP).4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard-

AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard - afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR

Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR

Sutter Yard - afreitag) 12/13/2012 Water was flowing through this

drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974 -Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)] FS Date: 8/30/2018 1:02:00 PM





Waterside view: overview of river bank

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.44	Rating **	U	Issue No.	139 (cont)	
LM End	1.44	Issue Type +	Ma	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.192502°		39.192502°
пеш				-121.9580	62 °	-121.958062°
DWR ID	17320					
Comment Code						

#### Inspector Comment

FS\_ID:53400 DS\_ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation too thick to clearly inspect WS pipe so assume same condition as last inspections so crossing remains Urgent due to pipe integrity. WS levee slope looks good. No signs of levee threat to the road crown. LS headwall looks in good condition (D. Sanoski - DWR UCIP).4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard-

AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard - afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR

Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag) 12/13/2012 Water was flowing through this

drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)]

FS Date: 8/30/2018 1:02:00 PM



Waterside view: water flowing from outlet pipe (pipe fully submerge)

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.44	Rating **	U	Issue No.	139 (cont)		
LM End	1.44	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	le/Longitude		
Calegory			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.1925	02 °	39.192502°	
пеш				-121.9580	62 °	-121.958062°	
DWR ID	17320						
Comment Code							

#### Inspector Comment

FS\_ID:53400 DS\_ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 WS vegetation too thick to clearly inspect WS pipe so assume same condition as last inspections so crossing remains Urgent due to pipe integrity. WS levee slope looks good. No signs of levee threat to the road crown. LS headwall looks in good condition (D. Sanoski - DWR UCIP).4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossing yet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard-

AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard - afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR

Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR

Sutter Yard - afreitag) 12/13/2012 Water was flowing through this

drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)] FS Date: 8/30/2018 1:02:00 PM



Landside view: overview of levee slope

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.91	Rating **	М	Issue No.	140			
LM End	1.91	Issue Type +	En	Location *				
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start End				
Item	DWR UCI	P Field Study		39.1881	80°	39.188180°		
пеш				-121.964688 ° -121.96468				
DWR ID	DWR ID 17322							
Comment Code								

## Inspector Comment

FS\_ID:51656 DS\_ID:17322 EP\_NO: 9258

Repair Type: Non-Urgent Crossing Status: Found

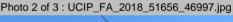
UCIP Comments: 4/24/2017 WS riser was still full of soil. Open 10" pipe on the WS bank was underwater during time of site visit. (DWR Sutter Yard- AFreitag)11/7/2016 WS riser still full of soil. No pump present and 10" pipe left opened on the WS. (DWR Sutter Yard-AFreitag)6/17/2016 Same as last inspection. 4/6/2015 CMP riser filled with silt/soil on WS. No other issues present.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 10-inch asphalt coated steel irrigation pipe through the levee, 3.7 feet below the crown. Pump installed on the waterside (WS). (Permit No. 9258, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002]. FS Date: 4/26/2017 10:15:33 AM

LM Start	1.91	Rating **	М	Issue No.	140 (cont)
LM End	1.91	Issue Type +	En	Location *	



Waterside view: overview





Waterside view: overview of CMP riser

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.91	Rating **	М	Issue No.	140 (cont)	
LM End	1.91	Issue Type +	En	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UCI	P Field Study		39.18818	0 °	39.188180°
item				-121.96468	8°	-121.964688 °
DWR ID	17322				·	·

## Inspector Comment

Comment Code

FS\_ID:51656 DS\_ID:17322 EP\_NO: 9258

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 WS riser was still full of soil. Open 10" pipe on the WS bank was underwater during time of site visit. (DWR Sutter Yard- AFreitag)11/7/2016 WS riser still full of soil. No pump present and 10" pipe left opened on the WS. (DWR Sutter Yard-AFreitag)6/17/2016 Same as last inspection. 4/6/2015 CMP riser filled with silt/soil on WS. No other issues present.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 10-inch asphalt coated steel irrigation pipe through the levee, 3.7 feet below the crown. Pump installed on the waterside (WS). (Permit No. 9258, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 4/26/2017 10:15:33 AM

## Photo 3 of 3: UCIP\_FA\_2018\_51656\_46996.jpg



Waterside view: CMP riser

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.91	Rating **	М	Issue No.	141			
LM End	1.91	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
Item	DWR UCI	P Field Study		39.1881	64°	39.188164°		
пеш			-121.964721 ° -121.964					
DWR ID	17321							
Comment Code								

#### Inspector Comment

FS\_ID:52947 DS\_ID:17321 EP\_NO: 9543

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 BRAND-NEW pipe and pump structure installed at this location. Pump in operation at time of inspection and no leaks were visible. Downgraded to Non-Urgent, will be further downgraded to No Action Needed when paperwork compliance with CVFPB is confirmed (D. Sanoski - DWR UCIP).4/24/2017 Abandoned and needs to be done so properly. Vegetation was to thick on the LS slope to see and sloughing or slope damage. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned. (DWR Sutter Yard-AFreitag)6/17/2016 Abandoned crossing. (DWR Sutter Yard afreitag)4/5/2016 Appears abandoned and should be done so properly. LS levee slope has a slight but sudden drop (could be due to improper compaction). Dense vegetation on LS prevented visibility of sloughing or other damage to levee. Could not locate leaky pipe marker. Per Bryan Reniff of Sutter Yard, marker was previously installed due to a high water event, not leaky pipe. Appears repair work to levee performed but unclear of extent. Gate valve on WS is bent and damaged, appears abandoned. Crossing a good candidate for video inspection. (DWR UCIP - kfazel)4/6/2015 Sloughing LS slope and river bank. DWR marking for leaky pipe. (DWR Sutter Yard afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard afreitag)12/13/2012 Sloughing LS slope and river bank. DWR marking for leaky pipe. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: BRAND-NEW: 14-inch concrete encased steel irrigation pipe through the levee, 12.5 feet below the crown. Slant pump mounted on a pile structure on the waterside (WS) berm. Slide gate in a 48-inch riser on the WS berm with a walkway to the pump. Pipe discharges into a concrete distribution box at the landside (LS) toe. Flap gate on the LS end. Electrical conduit mounted to power poles on the LS and WS for service to the pump on the WS. Electrical conduits may partially penetrate both embankments. (Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 1.84)].

FS Date: 8/30/2018 1:19:57 PM

Photo 1 of 3: UCIP\_FA\_2018\_52947\_47004.jpg



Waterside view: pipe @river bank

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.91	Rating **	М	Issue No.	141 (cont)		
LM End	1.91	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UC	IP Field Study		39.18816	4 °	39.188164°	
пеш				-121.964721		-121.964721°	
DWR ID	17321						
	Comment Code						

#### Inspector Comment

FS ID:52947 DS ID:17321 EP NO: 9543

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 BRAND-NEW pipe and pump structure installed at this location. Pump in operation at time of inspection and no leaks were visible. Downgraded to Non-Urgent, will be further downgraded to No Action Needed when paperwork compliance with CVFPB is confirmed (D. Sanoski - DWR UCIP).4/24/2017 Abandoned and needs to be done so properly. Vegetation was to thick on the LS slope to see and sloughing or slope damage. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned. (DWR Sutter Yard-AFreitag)6/17/2016 Abandoned crossing. (DWR Sutter Yard afreitag)4/5/2016 Appears abandoned and should be done so properly. LS levee slope has a slight but sudden drop (could be due to improper compaction). Dense vegetation on LS prevented visibility of sloughing or other damage to levee. Could not locate leaky pipe marker. Per Bryan Reniff of Sutter Yard, marker was previously installed due to a high water event, not leaky pipe. Appears repair work to levee performed but unclear of extent. Gate valve on WS is bent and damaged, appears abandoned. Crossing a good candidate for video inspection. (DWR UCIP - kfazel)4/6/2015 Sloughing LS slope and river bank. DWR marking for leaky pipe. (DWR Sutter Yard afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard afreitag)12/13/2012 Sloughing LS slope and river bank. DWR marking for leaky pipe. (DWR UCIP - pamatya)

FIELD STRUCT DESC: BRAND-NEW: 14-inch concrete encased steel irrigation pipe through the levee, 12.5 feet below the crown. Slant pump mounted on a pile structure on the waterside (WS) berm. Slide gate in a 48-inch riser on the WS berm with a walkway to the pump. Pipe discharges into a concrete distribution box at the landside (LS) toe. Flap gate on the LS end. Electrical conduit mounted to power poles on the LS and WS for service to the pump on the WS. Electrical conduits may partially penetrate both embankments. (Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 1.84)].

FS Date: 8/30/2018 1:19:57 PM





Waterside view: abandoned pump station.

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	1.91	Rating **	М	Issue No.	141 (cont)		
LM End	1.91	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UC	P Field Study		39.18816	64 °	39.188164°	
пеш				-121.96472	21 °	-121.964721 °	
DWR ID	D 17321						
Comment Code							

#### Inspector Comment

FS\_ID:52947 DS\_ID:17321 EP\_NO: 9543

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 BRAND-NEW pipe and pump structure installed at this location. Pump in operation at time of inspection and no leaks were visible. Downgraded to Non-Urgent, will be further downgraded to No Action Needed when paperwork compliance with CVFPB is confirmed (D. Sanoski - DWR UCIP).4/24/2017 Abandoned and needs to be done so properly. Vegetation was to thick on the LS slope to see and sloughing or slope damage. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned. (DWR Sutter Yard-AFreitag)6/17/2016 Abandoned crossing. (DWR Sutter Yard afreitag)4/5/2016 Appears abandoned and should be done so properly. LS levee slope has a slight but sudden drop (could be due to improper compaction). Dense vegetation on LS prevented visibility of sloughing or other damage to levee. Could not locate leaky pipe marker. Per Bryan Reniff of Sutter Yard, marker was previously installed due to a high water event, not leaky pipe. Appears repair work to levee performed but unclear of extent. Gate valve on WS is bent and damaged, appears abandoned. Crossing a good candidate for video inspection. (DWR UCIP - kfazel)4/6/2015 Sloughing LS slope and river bank. DWR marking for leaky pipe. (DWR Sutter Yard afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard afreitag)12/13/2012 Sloughing LS slope and river bank. DWR marking for leaky pipe. (DWR UCIP - pamatya) FIELD STRUCT DESC: BRAND-NEW: 14-inch concrete encased

FIELD\_STRUCT\_DESC: BRAND-NEW: 14-inch concrete encased steel irrigation pipe through the levee, 12.5 feet below the crown. Slant pump mounted on a pile structure on the waterside (WS) berm. Slide gate in a 48-inch riser on the WS berm with a walkway to the pump. Pipe discharges into a concrete distribution box at the landside (LS) toe. Flap gate on the LS end. Electrical conduit mounted to power poles on the LS and WS for service to the pump on the WS. Electrical conduits may partially penetrate both embankments. (Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 1.84)].

Photo 3 of 3: UCIP\_FA\_2018\_52947\_47002.jpg



Waterside view: abandoned pump station close-up.

FS Date: 8/30/2018 1:19:57 PM

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	2.08	Rating **	М	Issue No.		142
LM End	2.08	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1877	'17 °	39.187717°
item				-121.9677	12°	-121.967712°
DWR ID	17305					·

#### Inspector Comment

Comment Code

FS\_ID:51658 DS\_ID:17305 EP\_NO: 9541

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Abandoned and needs to be done so properly. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/6/2016 Abandoned crossing. Should be properly abandoned.4/6/2015 Same as last inspection. CMP standpipe with gate valve. Abandoned pump house. Pipe discharges into open ditch at landward toe- not found.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation pipe of an unknown material through the levee, 13.5 feet below the crown. Pump in a metal house on the WS (waterside) berm. Slide gate in a corrugated metal pipe riser on the WS slope. Service pole and guy wire anchor on the WS slope. (Automatic Board Order (ABO) issued as Permit No. 9541, 1974 - Wilbur, McGowan, Zinke). [Additional Reference(s): DWR Levee Logs, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 2.01)]. FS Date: 4/26/2017 10:40:26 AM

LM Start	2.08	Rating **	М	Issue No.	142 (cont)
LM End	2.08	Issue Type +	En	Location *	



Waterside view: overview

#### Photo 2 of 3: UCIP\_FA\_2018\_51658\_47011.jpg



Waterside view: overview of pipe

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence
C: Corrected Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	2.08	Rating **	M	Issue No.		142 (cont)
LM End	2.08	Issue Type +	En	Location *		
Category				GPS La	atitud	e/Longitude
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.1877	17°	39.187717°
пеш			-121.9677	12°	-121.967712°	
DWR ID	17305					·

# Inspector Comment

Comment Code

FS\_ID:51658 DS\_ID:17305 EP\_NO: 9541

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Abandoned and needs to be done so properly. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/6/2016 Abandoned crossing. Should be properly abandoned. 4/6/2015 Same as last inspection. CMP standpipe with gate valve. Abandoned pump house. Pipe discharges into open ditch at landward toe- not found.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation pipe of an unknown material through the levee, 13.5 feet below the crown. Pump in a metal house on the WS (waterside) berm. Slide gate in a corrugated metal pipe riser on the WS slope. Service pole and guy wire anchor on the WS slope. (Automatic Board Order (ABO) issued as Permit No. 9541, 1974 - Wilbur, McGowan, Zinke). [Additional Reference(s): DWR Levee Logs, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 2.01)].

Manual 136, March 1960 (HLM 2.0 FS Date: 4/26/2017 10:40:26 AM

Photo 3 of 3: UCIP\_FA\_2018\_51658\_47012.jpg



Waterside view: abandoned pump house

LM Start	2.45	Rating **	М	Issue No.		86		
LM End	2.46	Issue Type +	Ma	Location *	LS			
Category	Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End		
Item	Trim / Thin Trees			39.1879	11°	39.187955°		
пеш			-121.9745	91 °	-121.974693°			
DWR ID DWR_ST0003_01_f _ 2016_86								
Comment Code								

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	2.56	Rating **	М	Issue No.		143
LM End	2.56	Issue Type +	Ma	Location *		
Category				GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.1887	88°	39.188768°
пеш				-121.9763	)5 °	-121.976305°
DWR ID	17309					

#### Inspector Comment

Comment Code

FS\_ID:51660 DS\_ID:17309 EP\_NO: 9541

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Still no sign of WS pipe end or flapgate. LS appears to be in good condition. (DWR Sutter Yard- AFreitag)

11/7/2016 LS culvert measured to be 30"wide X 30"tall. WS end is not vidible so could not be measured. (DWR Sutter Yard-AFreitag)6/6/2016 Cannot locate the WS headwall/flapgate. Appears to have been silted over.4/6/2015 Same as last inspection. Concrete surg box on WS. Flap gate in concrete "U" headwall at the waterward end- not found.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD STRUCT DESC: 30-inch reinforced concrete box drainage culvert through the levee, 14.3 feet below the crown. 30-inch corrugated metal pipe connects concrete culvert from slide gate out to flap gate on the waterside (WS) end. Slide gate in a concrete riser on the waterside (WS) slope. (30-inch pipe [HLM 2.49] authorized under Automatic Board Order (ABO) issued as Permit No. 9541, 1974 - Wilbur, McGowan, Zinke). [Additional Reference(s): DWR Levee Logs, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 2.49)]. FS Date: 4/26/2017 10:46:22 AM

LM Start 2.56		Rating **	М	Issue No.	143 (cont)
LM End	2.56	Issue Type +	Ma	Location *	



Waterside view: overview- concrete surg tank

Photo 2 of 3: UCIP\_FA\_2018\_51660\_47026.jpg



Waterside view: overview- concrete surg tank

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	2.56	Rating **	М	Issue No.		143 (cont)
LM End	2.56	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.18876	в°	39.188768°
пеш				-121.97630	5°	-121.976305°
DWR ID	17309					·

## Inspector Comment

Comment Code

FS\_ID:51660 DS\_ID:17309 EP\_NO: 9541

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Still no sign of WS pipe end or flapgate. LS appears to be in good condition. (DWR Sutter Yard- AFreitag)

11/7/2016 LS culvert measured to be 30"wide X 30"tall. WS end is not vidible so could not be measured. (DWR Sutter Yard-AFreitag)6/6/2016 Cannot locate the WS headwall/flapgate. Appears to have been silted over.4/6/2015 Same as last inspection. Concrete surg box on WS. Flap gate in concrete "U" headwall at the waterward end- not found.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD STRUCT DESC: 30-inch reinforced concrete box drainage culvert through the levee, 14.3 feet below the crown. 30-inch corrugated metal pipe connects concrete culvert from slide gate out to flap gate on the waterside (WS) end. Slide gate in a concrete riser on the waterside (WS) slope. (30-inch pipe [HLM 2.49] authorized under Automatic Board Order (ABO) issued as Permit No. 9541, 1974 - Wilbur, McGowan, Zinke). [Additional Reference(s): DWR Levee Logs, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 2.49)]. FS Date: 4/26/2017 10:46:22 AM



Waterside view: slide gate inside concrete surg tank

LM Start	2.84	Rating **	М	Issue No.	No. 104		
LM End	2.84	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Slope Sta	bility		39.191162°		39.191162°	
item	n -121				65 °	-121.980365°	
DWR ID DWR_ST0003_01_s _ 2018_104							
Comment Code							

# S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Repair the erosion along the water side slope caused by vehicle traffic.

Photo 1 of 1: FA 2018 ST0003 264 104 20180905 00024.jpg

View of the erosion along the waterside slope caused by vehicle traffic.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.32	Rating **	U	Issue No.		144	
LM End	3.32	Issue Type +	Ma	Location *			
Category				GPS La	le/Longitude		
Calegory			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.1968	65 °	39.196865°	
item				-121.9852	80°	-121.985280°	
DWR ID 17311							
	Comment Code						

#### Inspector Comment

FS\_ID:52949 DS\_ID:17311 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Pipe found; at a different Lat/Long than is listed, however. Revised Lat/Long is (39.196865, -121.985280; CLM 3.32). WS pipe end is visible and has a functioning slide gate; LS pipe end is exposed with no closure device or headwall. Keeping as Urgent because the LS pipe discharges into a hole and could pose a threat to the levee prism during a high water event. There are also cracks on the crown that could be related to the pipe beneath. Recommend an internal pipe inspection to be sure of the levee integrity (D.Sanoski DWR UCIP).4/6/2017 Pipe was found in January 2017 during a high water event when water uncovered the buried WS end which led to uncontrolled water flow through during the high water event. The WS pipe opening was temporarily blocked off by plywood and sandbags until the pipe can be properly plugged or abandoned. Pics updated. (DWR Sutter Yard- Afreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate.7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Slide gate on the waterside (WS) end. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.25)]. FS Date: 8/30/2018 1:45:35 PM

Photo 1 of 3: UCIP\_FA\_2018\_52949\_76919.jpg



LS view of water exiting the pipe.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.32	Rating **	U	Issue No.		144 (cont)		
LM End	3.32	Issue Type +	Ма	Location *				
Category	ental	GPS Latitude/Longitude						
Category				Start		End		
ltom	DWR UCI	P LMA Respo	nsibility	39.19686	5°	39.196865°		
Item -12'				-121.98528	o°	-121.985280 °		
DWR ID	17311							
	Comment Code							

#### Inspector Comment

FS\_ID:52949 DS\_ID:17311 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Pipe found; at a different Lat/Long than is listed, however. Revised Lat/Long is (39.196865, -121.985280; CLM 3.32). WS pipe end is visible and has a functioning slide gate; LS pipe end is exposed with no closure device or headwall. Keeping as Urgent because the LS pipe discharges into a hole and could pose a threat to the levee prism during a high water event. There are also cracks on the crown that could be related to the pipe beneath. Recommend an internal pipe inspection to be sure of the levee integrity (D.Sanoski DWR UCIP).4/6/2017 Pipe was found in January 2017 during a high water event when water uncovered the buried WS end which led to uncontrolled water flow through during the high water event. The WS pipe opening was temporarily blocked off by plywood and sandbags until the pipe can be properly plugged or abandoned. Pics updated. (DWR Sutter Yard- Afreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate.7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Slide gate on the waterside (WS) end. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.25)]. FS Date: 8/30/2018 1:45:35 PM

#### Photo 2 of 3: UCIP\_FA\_2018\_52949\_76920.jpg



LS view from levee shoulder

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.32	Rating **	U	Issue No.	144 (cont)		
LM End	3.32	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
ltom	DWR UCI	P LMA Respo	nsibility	39.19686	5 °	39.196865°	
пеш	Item				o°	-121.985280 °	
DWR ID	D 17311						
Comment Code							

#### Inspector Comment

FS\_ID:52949 DS\_ID:17311 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Pipe found; at a different Lat/Long than is listed, however. Revised Lat/Long is (39.196865, -121.985280; CLM 3.32). WS pipe end is visible and has a functioning slide gate; LS pipe end is exposed with no closure device or headwall. Keeping as Urgent because the LS pipe discharges into a hole and could pose a threat to the levee prism during a high water event. There are also cracks on the crown that could be related to the pipe beneath. Recommend an internal pipe inspection to be sure of the levee integrity (D.Sanoski DWR UCIP).4/6/2017 Pipe was found in January 2017 during a high water event when water uncovered the buried WS end which led to uncontrolled water flow through during the high water event. The WS pipe opening was temporarily blocked off by plywood and sandbags until the pipe can be properly plugged or abandoned. Pics updated. (DWR Sutter Yard- Afreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate.7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Slide gate on the waterside (WS) end. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log. 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.25)]. FS Date: 8/30/2018 1:45:35 PM

Photo 3 of 3: UCIP\_FA\_2018\_52949\_76921.jpg



WS view of the temporary plug on WS end.

## Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.41	Rating **	U	Issue No.		145
LM End	3.41	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Category				Start		End
Item	DWR UCI	P Field Study		39.1981	80°	39.198180°
item				-121.9855	57°	-121.985557°
DWR ID	17312					

## Inspector Comment

Comment Code

FS\_ID:53401 DS\_ID:17312 EP\_NO: 9539 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection. Recommend internal pipe inspection to verify pipe integrity and levee integrity so crossing remains Urgent (D. Sanoski - DWR UCIP).4/24/2017 Pipe leaked during the Jan/Feb 2017 high water event. Gap between the top of the WS headwall and concrete plug plus the WS airvents going underwater are the cause of the uncontrolled water flows. (DWR Sutter Yard- AFreitag)11/7/2016 Nothing has changed with this crossing since the last inspection. The gap between the top of the WS headwall and concrete plug could be a problem with water flow during high water times. (DWR Sutter Yard- AFreitag)6/6/2016 One of the pipes appear to be leaking inside of the concrete culvert. From the WS headwall water can be heard flowing inside of the levee behind the concrete plug. The concrete plug also appears to leak as water current can be seen flowing around it. There is also a 1" gap at the top of the plug and the old WS headwall that will allow high water to flow through uncontrolled. (DWR Sutter Yard - afreitag)4/6/2015 6-inch and 18inch pipes still present in crossing and WS end still plugged with concrete. It seems that the system was originally designed for drainage but later converted into an irrigation system, 6-inch GI pipe and 18-inch PVC pipes inserted into culvert from LS (not plugged). WS opening is plugged with concrete. Probably pump is located 350 ft from levee as seen from Google Earth Map. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 30-inch by 36-inch reinforced concrete box drainage and irrigation culvert through the levee, invert 13.6 feet below the crown. Gates with 2-inch flashboards on the waterside (WS) end. 6inch and 18-inch polyvinyl chloride (PVC) pipes through the culvert on the landside (LS). Culvert designed for drainage but now used for irrigation. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.33)]. FS Date: 8/30/2018 10:18:00 AM



Waterside view: plugged concrete structure and siphon breakers

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.41	Rating **	U	Issue No.		145 (cont)	
LM End	3.41	Issue Type +	En	Location *			
Supplemental Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		39.19818	o°	39.198180°	
пеш					7°	-121.985557°	
DWR ID	17312						

## Inspector Comment

Comment Code

FS\_ID:53401 DS\_ID:17312 EP\_NO: 9539 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection. Recommend internal pipe inspection to verify pipe integrity and levee integrity so crossing remains Urgent (D. Sanoski - DWR UCIP).4/24/2017 Pipe leaked during the Jan/Feb 2017 high water event. Gap between the top of the WS headwall and concrete plug plus the WS airvents going underwater are the cause of the uncontrolled water flows. (DWR Sutter Yard- AFreitag)11/7/2016 Nothing has changed with this crossing since the last inspection. The gap between the top of the WS headwall and concrete plug could be a problem with water flow during high water times. (DWR Sutter Yard- AFreitag)6/6/2016 One of the pipes appear to be leaking inside of the concrete culvert. From the WS headwall water can be heard flowing inside of the levee behind the concrete plug. The concrete plug also appears to leak as water current can be seen flowing around it. There is also a 1" gap at the top of the plug and the old WS headwall that will allow high water to flow through uncontrolled. (DWR Sutter Yard - afreitag)4/6/2015 6-inch and 18inch pipes still present in crossing and WS end still plugged with concrete. It seems that the system was originally designed for drainage but later converted into an irrigation system, 6-inch GI pipe and 18-inch PVC pipes inserted into culvert from LS (not plugged). WS opening is plugged with concrete. Probably pump is located 350 ft from levee as seen from Google Earth Map. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 30-inch by 36-inch reinforced concrete box drainage and irrigation culvert through the levee, invert 13.6 feet below the crown. Gates with 2-inch flashboards on the waterside (WS) end. 6inch and 18-inch polyvinyl chloride (PVC) pipes through the culvert on the landside (LS). Culvert designed for drainage but now used for irrigation. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.33)]. FS Date: 8/30/2018 10:18:00 AM



Landside view: overview- concrete culvert and pipes

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.41	Rating **	U	Issue No.		145 (cont)	
LM End	3.41	Issue Type +	En	Location *			
Category Supplemental			GPS Latitude/Longitude				
			Start		End		
Item	DWR UC	P Field Study		39.1981	80°	39.198180°	
пеш				-121.9855	57°	-121.985557°	
DWR ID	17312					·	
Comment Code							

#### Inspector Comment

FS\_ID:53401 DS\_ID:17312 EP\_NO: 9539 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection. Recommend internal pipe inspection to verify pipe integrity and levee integrity so crossing remains Urgent (D. Sanoski - DWR UCIP).4/24/2017 Pipe leaked during the Jan/Feb 2017 high water event. Gap between the top of the WS headwall and concrete plug plus the WS airvents going underwater are the cause of the uncontrolled water flows. (DWR Sutter Yard- AFreitag)11/7/2016 Nothing has changed with this crossing since the last inspection. The gap between the top of the WS headwall and concrete plug could be a problem with water flow during high water times. (DWR Sutter Yard- AFreitag)6/6/2016 One of the pipes appear to be leaking inside of the concrete culvert. From the WS headwall water can be heard flowing inside of the levee behind the concrete plug. The concrete plug also appears to leak as water current can be seen flowing around it. There is also a 1" gap at the top of the plug and the old WS headwall that will allow high water to flow through uncontrolled. (DWR Sutter Yard - afreitag)4/6/2015 6-inch and 18inch pipes still present in crossing and WS end still plugged with concrete. It seems that the system was originally designed for drainage but later converted into an irrigation system, 6-inch GI pipe and 18-inch PVC pipes inserted into culvert from LS (not plugged). WS opening is plugged with concrete. Probably pump is located 350 ft from levee as seen from Google Earth Map. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 30-inch by 36-inch reinforced concrete box drainage and irrigation culvert through the levee, invert 13.6 feet below the crown. Gates with 2-inch flashboards on the waterside (WS) end. 6inch and 18-inch polyvinyl chloride (PVC) pipes through the culvert on the landside (LS). Culvert designed for drainage but now used for irrigation. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.33)]. FS Date: 8/30/2018 10:18:00 AM



Landside view: overview of concrete culvert and pipes

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

		D-4: **		Innun Nin		4.4	
LM Start	3.54	Rating **	М	Issue No.		11	
LM End	3.81	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachments			39.2000	07°	39.203634°	
пеш				-121.9852	57°	-121.982977°	
DWR ID DWR_ST0003_01_f _ 2016_11							
		Comn	nent Cod	de			
BU : Buildi	ng						
Inspector Comment							



View of a trailer next to the waterside toe.

LM Start	3.68	Rating **	М	Issue No.		146	
LM End	3.68	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.20183	1°	39.201831 °	
item				-121.98400	6°	-121.984006°	
DWR ID	17313						
Comment Code							

#### Inspector Comment

FS\_ID:51666 DS\_ID:17313 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Slide gate structure found on WS about 10ft from levee toe. Vegetation was too thick to see if there were any more appurtances associated with this crossing visible on the WS. Nothing was visible on the LS. House located above pipe alignment at LS levee toe. Crossing appears abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate. 4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Slide gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.6)]. FS Date: 4/26/2017 12:11:41 PM

## Photo 1 of 2: UCIP\_FA\_2018\_51666\_77004.jpg



Slide gate structure found on WS

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.68	Rating **	М	Issue No.		146 (cont)		
LM End	3.68	Issue Type +	Ма	Location *				
Category			Supplemental GPS Latitude/Longitud					de/Longitude
Category	Category			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.20183	1°	39.201831°		
пеш				-121.98400	6°	-121.984006°		
DWR ID	17313							
	Comment Code							

# Inspector Comment

FS\_ID:51666 DS\_ID:17313 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Slide gate structure found on WS about 10ft from levee toe. Vegetation was too thick to see if there were any more appurtances associated with this crossing visible on the WS. Nothing was visible on the LS. House located above pipe alignment at LS levee toe. Crossing appears abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate. 4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Slide gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.6)]. FS Date: 4/26/2017 12:11:41 PM

Photo 2 of 2: UCIP\_FA\_2018\_51666\_77005.jpg



View of WS from levee shoulder

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.85	Rating **	М	Issue No.		Issue No.		147
LM End	3.85	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCI	P Field Study		39.2041	41 °	39.204141°		
item			-121.9826	98°	-121.982698°			
DWR ID 17314								

#### Inspector Comment

Comment Code

FS ID:51671 DS ID:17314 EP\_NO: 9501-1

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/17/2016 DO NOT BELIEVE THIS IS AN ABANDONED CROSSING- there is a newer looking pump present inside the WS pump house with an active PG&E power meter. Also the dirt below the siphon breaker inside of the riser on the LS shoulder was wet indicating that the breaker has had running water through it recently. Also the ground under the LS toe airvent was wet indicating that it too has recently had water flowing through it.

4/4/2016 Concrete box on LS still silted in. Cracking and slope failure previously cited appears to have been repaired as we could not locate. Shutoff valves appear in good condition. If crossing is abandoned. should be done so properly.4/6/2015 Same as last inspection. Concrete pit on WS berm. Concrete distribution box on LS silted and erosion around the box. Slope failure/ transverse cracks on LS levee slope. Two depressions on WS berm. 6/30/2014 Crossing appears to be being made active again. WS bank has been cleared of all vegetation and debris to allow pump to slide down to water level. New shutoff valve installed on WS shoulder inside of cmp stand pipe. New air-vac installed inside cmp standpipe on LS shoulder and air vent installed on LS toe. Could not Locate pipe end on LS. Need to check for permit number for work done.12/30/2013 Repairs to LS and WS slopes have been completed. Not sure if this is an active or abandoned crossing. LS distribution box is still slited in.7/29/2013 Repairs to LS slope and pipe are in progress. Nothing has been done yet to the WS depressions

FIELD\_STRUCT\_DESC: 16-inch asphalt coated steel irrigation pipe through the levee, 2 feet below the crown. Pump house over concrete pit on the waterside (WS) berm. A 16-inch gear-operated butterfly valve inside riser with cover off the WS shoulder. Siphon breaker inside riser with cover off the landside (LS) shoulder. Discharges into a concrete box at the LS toe. (Permit No. 9501-1, 2014 - Howard). This pipe was a replacement for an existing (failed) 16-inch pipe under DSID 25455, referenced in the Levee Log and replaced under Permit No. 9501-1. [Additional Reference(s): DWR Levee Log, 2002]. The Levee Log references this pipe's appurtenances along with the original 16-inch under DSID 25455.

FS Date: 4/26/2017 12:29:36 PM





WS river bank

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.85	Rating **	М	Issue No.		147 (cont)	
LM End	3.85	Issue Type +	En	Location *			
Supplemental				GPS La	tituc	le/Longitude	
Category			Start		End		
Item	DWR UCI	P Field Study		39.20414	41 °	39.204141 °	
item			-121.98269	98°	-121.982698 °		
DWR ID 17314							

#### Inspector Comment

Comment Code

FS\_ID:51671 DS\_ID:17314 EP\_NO: 9501-1

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)6/17/2016 DO NOT BELIEVE THIS IS AN ABANDONED CROSSING- there is a newer looking pump present inside the WS pump house with an active PG&E power meter. Also the dirt below the siphon breaker inside of the riser on the LS shoulder was wet indicating that the breaker has had running water through it recently. Also the ground under the LS toe airvent was wet indicating that it too has recently had water flowing through it.

4/4/2016 Concrete box on LS still silted in. Cracking and slope failure previously cited appears to have been repaired as we could not locate. Shutoff valves appear in good condition. If crossing is abandoned. should be done so properly.4/6/2015 Same as last inspection. Concrete pit on WS berm. Concrete distribution box on LS silted and erosion around the box. Slope failure/ transverse cracks on LS levee slope. Two depressions on WS berm. 6/30/2014 Crossing appears to be being made active again. WS bank has been cleared of all vegetation and debris to allow pump to slide down to water level. New shutoff valve installed on WS shoulder inside of cmp stand pipe. New air-vac installed inside cmp standpipe on LS shoulder and air vent installed on LS toe. Could not Locate pipe end on LS. Need to check for permit number for work done.12/30/2013 Repairs to LS and WS slopes have been completed. Not sure if this is an active or abandoned crossing. LS distribution box is still slited in.7/29/2013 Repairs to LS slope and pipe are in progress. Nothing has been done yet to the WS depressions.

FIELD\_STRUCT\_DESC: 16-inch asphalt coated steel irrigation pipe through the levee, 2 feet below the crown. Pump house over concrete pit on the waterside (WS) berm. A 16-inch gear-operated butterfly valve inside riser with cover off the WS shoulder. Siphon breaker inside riser with cover off the landside (LS) shoulder. Discharges into a concrete box at the LS toe. (Permit No. 9501-1, 2014 - Howard). This pipe was a replacement for an existing (failed) 16-inch pipe under DSID 25455, referenced in the Levee Log and replaced under Permit No. 9501-1. [Additional Reference(s): DWR Levee Log, 2002]. The Levee Log references this pipe's appurtenances along with the original 16-inch under DSID 25455.

FS Date: 4/26/2017 12:29:36 PM



WS standpipe with shut off valve inside

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	3.85	Rating **	М	Issue No.		147 (cont)	
LM End	3.85	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
DWR UCIP Field Study				39.2041	41 °	39.204141 °	
item				-121.9826	98°	-121.982698 °	
DWR ID	17314					·	

## Inspector Comment

Comment Code

FS\_ID:51671 DS\_ID:17314 EP\_NO: 9501-1

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)6/17/2016 DO NOT BELIEVE THIS IS AN ABANDONED CROSSING- there is a newer looking pump present inside the WS pump house with an active PG&E power meter. Also the dirt below the siphon breaker inside of the riser on the LS shoulder was wet indicating that the breaker has had running water through it recently. Also the ground under the LS toe airvent was wet indicating that it too has recently had water flowing through it.

4/4/2016 Concrete box on LS still silted in. Cracking and slope failure previously cited appears to have been repaired as we could not locate. Shutoff valves appear in good condition. If crossing is abandoned. should be done so properly.4/6/2015 Same as last inspection. Concrete pit on WS berm. Concrete distribution box on LS silted and erosion around the box. Slope failure/ transverse cracks on LS levee slope. Two depressions on WS berm. 6/30/2014 Crossing appears to be being made active again. WS bank has been cleared of all vegetation and debris to allow pump to slide down to water level. New shutoff valve installed on WS shoulder inside of cmp stand pipe. New air-vac installed inside cmp standpipe on LS shoulder and air vent installed on LS toe. Could not Locate pipe end on LS. Need to check for permit number for work done.12/30/2013 Repairs to LS and WS slopes have been completed. Not sure if this is an active or abandoned crossing. LS distribution box is still slited in.7/29/2013 Repairs to LS slope and pipe are in progress. Nothing has been done yet to the WS depressions.

FIELD\_STRUCT\_DESC: 16-inch asphalt coated steel irrigation pipe through the levee, 2 feet below the crown. Pump house over concrete pit on the waterside (WS) berm. A 16-inch gear-operated butterfly valve inside riser with cover off the WS shoulder. Siphon breaker inside riser with cover off the landside (LS) shoulder. Discharges into a concrete box at the LS toe. (Permit No. 9501-1, 2014 - Howard). This pipe was a replacement for an existing (failed) 16-inch pipe under DSID 25455, referenced in the Levee Log and replaced under Permit No. 9501-1. [Additional Reference(s): DWR Levee Log, 2002]. The Levee Log references this pipe's appurtenances along with the original 16-inch under DSID 25455.

FS Date: 4/26/2017 12:29:36 PM



WS shut off valve

## Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.44	Rating **	М	Issue No.	148		
LM End	4.44	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP Field Study			39.210230°		39.210230°	
пеш				-121.988223 °		-121.988223 °	
DWR ID	17297						
Comment Code							

#### Inspector Comment

FS\_ID:52952 DS\_ID:17297 EP\_NO: 9501-A Repair Type: Non-Urgent

Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection, with no signs of any improvements made to pipe or pump. Vegetation obstructed full inspection at water level, but the levee looks in very good condition with no signs of threat. Downgrading to Non-Urgent from Urgent due to the good condition of the levee (D. Sanoski - DWR UCIP).4/24/2017 WS was mostly underwater during site visit. Not sure if the 10" pipe was still opened or capped on the WS end but no water appeared to be free flowing through the levee. No sign of orange pump. (DWR Sutter Yard-AFreitag)11/7/2016 Orange pump was not present at this inspection. 10" pipe penetration left opened on WS end. (DWR Sutter Yard-AFreitag)6/17/2016 Orange pump motor was lowered down the WS berm to water level and was pumping water through the pipe to the LS outlet. What is pictured in (photo#17 UCIP Photos No.75150) as "pipe debris" is the pipe section that is used to connect the orange pump to the open 10" pipe that penetrates the levee. In the same photo the "possible penetration" is the flexible suction line for the pump. (DWR Sutter Yard - afreitag)4/4/2016 Flow meter installed on LS indicates this pipe is used seasonally and not abandoned. Pipe open on WS (see photo). No cover on old siphon breaker. Slight sloughing of LS slope. (DWR UCIP - kfazel)4/6/2015 Pump disconnected and pulled up to WS toe. Not Sure if leaky valve has ever been fixed. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Not an abandoned crossing. Pump is connected to WS pipe end at water level and is pumping water to LS and then goes underground to an irrigation ditch about 100yds. upstream. Pump and pipes are disconnected and pulled up to WS toe for high water season. Leaky valve on LS shoulder does not appear to have been fixed. (DWR Sutter Yard - afreitag)12/12/2012 Motor and pump on berm. Appears an abandoned crossing. Leaky valve on LS slope. Pipe removed and laying on berm. No electric connection to the pump. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 10-inch asphalt coated steel irrigation pipe through the levee, 5 feet below the crown. Siphon breaker off the landside (LS) shoulder. Motor and pump on the waterside (WS) at water level. The pipe is open through the WS slope with an air vent on the apex of the pipe. Another piece of pipe, found laying on the WS slope in 2016, is used to connect the 10-inch open pipe to the pump at the water level. A flexible suction line for the pump found in the water above the pump and motor. Abandoned 16-inch crossing (DSID 17326) associated with this permit also at this location. Pipe through the LS slope is steel with polyvinyl chloride (PVC) pipe installed at its flange;



Crown view: transverse cracks on levee road.

# **Levee Inspection Report By Mile - Fall 2018**

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

PVC pipe partially penetrates the LS slope. Flow meter installed to PVC pipe section on LS. (Permit No. 9501-A, 1978 - Mayfair Packing, Inc.). [Additional Reference(s): DWR Levee Log, 2002]. FS Date: 8/30/2018 11:06:59 AM

LM Start	4.44	Rating **	М	Issue No.	148 (cont)
LM End	4.44	Issue Type +	En	Location *	





Waterside view: overview of pump and abandoned pipe

LM Start	4.44	Rating **	М	Issue No.	148 (cont)
LM End	4.44	Issue Type +	En	Location *	



WS view: pump motor on the berm (found at water level in 2016)

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.44	Rating **	М	Issue No.	149			
LM End	4.44	Issue Type +	En	Location *				
Supplemental				GPS Lat	ituc	le/Longitude		
Calegory	Category			Start		End		
ltom	DWR UCI	P Field Study		39.21023	o°	39.210230	0	
Item				-121.98822	3°	-121.988223	0	
DWR ID 17326								
Comment Code								

#### Inspector Comment

FS\_ID:52953 DS\_ID:17326 EP\_NO: 9501

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection. Needs to be abandoned properly; downgrading to Non-Urgent from Urgent (D. Sanoski - DWR UCIP).4/24/2017 Abandoned and needs to be done properly. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)6/17/2016 Abanoned pipe. photo comments updated. (DWR Sutter Yard afreitag)4/4/2016 Open on WS. Needs proper abandonment. Contact owner to determine status of crossing. (DWR UCIP - kfazel)4/6/2015 Same as last inspection. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/12/2012 Need to be properly abandoned. Transverse cracks on levee road. Also found a concrete outlet on LS. It is not clear whether this passes through the levee. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: \*ABANDONED\* 16-inch steel irrigation pipe, 13.9 feet below the crown. Gate valve and pump in pump house on the waterside (WS) berm. 2-3 inch electrical conduit penetrates levee alongside pipe. Flap gate and concrete distribution box on the landside (LS). (Automatic Board Order (ABO) issued as Permit No. 9501, 1974 -Mayfair Farms, abandoned under Permit No. 9501-A, 1978 - MayFair Packing, Inc.). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 4.37)] FS Date: 8/30/2018 11:27:41 AM



Crown view: cracks along pipe alignment (transverse crack)

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.44	Rating **	М	Issue No.	149 (cont)		
LM End	4.44	Issue Type +	En	Location *			
Supplemental				GPS La	atitud	le/Longitude	
Category			Start		End		
ltom	DWR UCI	P Field Study		39.2102	30°	39.210230°	
Item				-121.9882	23 °	-121.988223 °	
DWR ID 17326							
Comment Code							

# Inspector Comment

FS\_ID:52953 DS\_ID:17326 EP\_NO: 9501

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection. Needs to be abandoned properly; downgrading to Non-Urgent from Urgent (D. Sanoski - DWR UCIP).4/24/2017 Abandoned and needs to be done properly. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)6/17/2016 Abanoned pipe. photo comments updated. (DWR Sutter Yard afreitag)4/4/2016 Open on WS. Needs proper abandonment. Contact owner to determine status of crossing. (DWR UCIP - kfazel)4/6/2015 Same as last inspection. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/12/2012 Need to be properly abandoned. Transverse cracks on levee road. Also found a concrete outlet on LS. It is not clear whether this passes through the levee. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: \*ABANDONED\* 16-inch steel irrigation pipe, 13.9 feet below the crown. Gate valve and pump in pump house on the waterside (WS) berm. 2-3 inch electrical conduit penetrates levee alongside pipe. Flap gate and concrete distribution box on the landside (LS). (Automatic Board Order (ABO) issued as Permit No. 9501, 1974 -Mayfair Farms, abandoned under Permit No. 9501-A, 1978 - MayFair Packing, Inc.). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 4.37)] FS Date: 8/30/2018 11:27:41 AM



Waterside view: overview

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.44	Rating **	М	Issue No.	149 (cont)	
LM End	4.44	Issue Type +	En	Location *		
Category				GPS Lat	itud	e/Longitude
Calegory			Start		End	
Item	DWR UCIP Field Study			39.21023	o°	39.210230°
пеш				-121.98822	3°	-121.988223 °
DWR ID	17326					·

# Inspector Comment

Comment Code

FS\_ID:52953 DS\_ID:17326 EP\_NO: 9501

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection. Needs to be abandoned properly; downgrading to Non-Urgent from Urgent (D. Sanoski - DWR UCIP).4/24/2017 Abandoned and needs to be done properly. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)6/17/2016 Abanoned pipe. photo comments updated. (DWR Sutter Yard afreitag)4/4/2016 Open on WS. Needs proper abandonment. Contact owner to determine status of crossing. (DWR UCIP - kfazel)4/6/2015 Same as last inspection. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/12/2012 Need to be properly abandoned. Transverse cracks on levee road. Also found a concrete outlet on LS. It is not clear whether this passes through the levee. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: \*ABANDONED\* 16-inch steel irrigation pipe, 13.9 feet below the crown. Gate valve and pump in pump house on the waterside (WS) berm. 2-3 inch electrical conduit penetrates levee alongside pipe. Flap gate and concrete distribution box on the landside (LS). (Automatic Board Order (ABO) issued as Permit No. 9501, 1974 -Mayfair Farms, abandoned under Permit No. 9501-A, 1978 - MayFair Packing, Inc.). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 4.37)] FS Date: 8/30/2018 11:27:41 AM



Waterside view: overview of pipe

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.44	Rating **	М	Issue No.		150		
LM End	4.44	Issue Type +	En	Location *				
Category	ental	GPS La	atitud	e/Longitude				
Category			Start		End			
Itom	DWR UCIP Field Study				80°	39.210280°		
Item				-121.9882	84°	-121.988284°		
DWR ID	DWR ID 17484							
Comment Code								

# Inspector Comment

FS\_ID:51676 DS\_ID:17484 EP\_NO: N/A

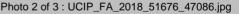
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Abandoned- needs to be done so properly. WS underwater during site visit. (DWR Sutter Yard-AFreitag)11/7/2016 Abandoned but needs to be done so properly. (DWR Sutter Yard- AFreitag)9/29/2016 Crossing has been downgraded from Urgent to Non-Urgent crossing is abandoned and WS surge box is full of debris. Need to contact owner and have owner coordinate with CVFPB to comply with Title 23. (DWR UCIP omagana)6/17/2016 Abandoned crossing. Photo comments updated. (DWR Sutter Yard - afreitag)4/4/2016 Same as last inspection. (DWR UCIP - kfazel)4/6/2015 Crossing appears to be an old irrigation structure and not a drain pipe. It appears abandoned as WS surge box is full of debris. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/12/2012 Debris and detorated concrete. Gate valve in surge tank. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch steel irrigation pipe through the levee, invert 26 feet below the crown. Slide gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 136, March 1960 (HLM 4.37)]. FS Date: 4/26/2017 12:59:53 PM

LM Start	4.44	Rating **	M	Issue No.	150 (cont)
LM End	4.44	Issue Type +	En	Location *	



Crown view: transverse crack on levee road





Waterside view: overview of concrete surge box

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

\*\* Rating

A : Not Applicable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.44	Rating **	M	Issue No.	150 (cont)	
LM End	4.44	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		39.21028	0 °	39.210280°
пеш			-121.98828	4 °	-121.988284°	
DWR ID	17484					

# Inspector Comment

Comment Code

FS\_ID:51676 DS\_ID:17484 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Abandoned- needs to be done so properly. WS underwater during site visit. (DWR Sutter Yard-AFreitag)11/7/2016 Abandoned but needs to be done so properly. (DWR Sutter Yard- AFreitag)9/29/2016 Crossing has been downgraded from Urgent to Non-Urgent crossing is abandoned and WS surge box is full of debris. Need to contact owner and have owner coordinate with CVFPB to comply with Title 23. (DWR UCIP omagana)6/17/2016 Abandoned crossing. Photo comments updated. (DWR Sutter Yard - afreitag)4/4/2016 Same as last inspection. (DWR UCIP - kfazel)4/6/2015 Crossing appears to be an old irrigation structure and not a drain pipe. It appears abandoned as WS surge box is full of debris. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/12/2012 Debris and detorated concrete. Gate valve in surge tank. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch steel irrigation pipe through the levee, invert 26 feet below the crown. Slide gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 136, March 1960 (HLM 4.37)]. FS Date: 4/26/2017 12:59:53 PM



Waterside view: concrete surge box

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.64	Rating **	М	Issue No.		151		
LM End	4.64	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P Field Study		39.21262	27°	39.212627°		
пеш				-121.99041	3°	-121.990413°		
DWR ID	17318					·		

# Inspector Comment

Comment Code

FS\_ID:51677 DS\_ID:17318 EP\_NO: 9501

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 LS shoulder erosion repaired. Not sure if any changes or repairs were done to the pipe itself. (DWR Sutter Yard-AFreitag)11/7/2016 LS erosion still a problem at the LS shoulder. (DWR Sutter Yard- AFreitag)6/6/2016 LS erosion still present and appears to be getting worse. It is only a few inches away from affecting the paved road way. (DWR Sutter Yard - afreitag)4/4/2016 Same as last inspection. Erosion problem is urgently in need of repair. (DWR UCIP - kfazel)4/6/2015 Erosion problem still present near the LS shoulder. If it gets any worse then it may start to affect the road way. Found a siphon breaker on LS. Antenna and pump station on WS. Huge erosion on LS slope. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Erosion near LS shoulder may start affecting the roadway if it gets any worse.12/12/2012 Found a siphon breaker on LS. Antenna and pump station on WS. Huge erosion on LS slope. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: 24-inch asphalt coated steel irrigation pipe, 4 feet below the crown. Slant pump on a steel platform on the waterside (WS) berm. Siphon breaker on the apex of the pipe and off the levee crown on the landside (LS). 2 shut-off (butterfly) valves off the LS toe. Power pole with electrical conduit and panel on the LS toe. Pipe appears to run diagonally through the levee and discharges into a ditch off the LS toe. Gate structure on the outlet at the ditch. (Automatic Board Order (ABO) issued as Permit No. 9501, 1974 - Mayfair Farms, Inc.). Slant pump installed under Permit No. 10935, 1975 - Pires. [Additional Reference(s): DWR Levee Log, 2002]. FS Date: 4/26/2017 1:01:23 PM



Waterside view: overview

# Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.64	Rating **	М	Issue No.		151 (cont)		
LM End	4.64	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P Field Study		39.21262	27°	39.212627°		
пеш			-121.99041	ı3°	-121.990413°			
DWR ID	17318					·		

# Inspector Comment

Comment Code

FS\_ID:51677 DS\_ID:17318 EP\_NO: 9501

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 LS shoulder erosion repaired. Not sure if any changes or repairs were done to the pipe itself. (DWR Sutter Yard-AFreitag)11/7/2016 LS erosion still a problem at the LS shoulder. (DWR Sutter Yard- AFreitag)6/6/2016 LS erosion still present and appears to be getting worse. It is only a few inches away from affecting the paved road way. (DWR Sutter Yard - afreitag)4/4/2016 Same as last inspection. Erosion problem is urgently in need of repair. (DWR UCIP - kfazel)4/6/2015 Erosion problem still present near the LS shoulder. If it gets any worse then it may start to affect the road way. Found a siphon breaker on LS. Antenna and pump station on WS. Huge erosion on LS slope. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Erosion near LS shoulder may start affecting the roadway if it gets any worse.12/12/2012 Found a siphon breaker on LS. Antenna and pump station on WS. Huge erosion on LS slope. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: 24-inch asphalt coated steel irrigation pipe, 4 feet below the crown. Slant pump on a steel platform on the waterside (WS) berm. Siphon breaker on the apex of the pipe and off the levee crown on the landside (LS). 2 shut-off (butterfly) valves off the LS toe. Power pole with electrical conduit and panel on the LS toe. Pipe appears to run diagonally through the levee and discharges into a ditch off the LS toe. Gate structure on the outlet at the ditch. (Automatic Board Order (ABO) issued as Permit No. 9501, 1974 - Mayfair Farms, Inc.). Slant pump installed under Permit No. 10935, 1975 - Pires. [Additional Reference(s): DWR Levee Log, 2002]. FS Date: 4/26/2017 1:01:23 PM

Photo 2 of 3 : UCIP\_FA\_2018\_51677\_47091.jpg

Waterside view: overview of pump station

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.64	Rating **	М	Issue No.		151 (cont)		
LM End	4.64	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P Field Study		39.21262	27°	39.212627°		
пеш			-121.99041	ı3°	-121.990413°			
DWR ID	17318					·		

# Inspector Comment

Comment Code

FS\_ID:51677 DS\_ID:17318 EP\_NO: 9501

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 LS shoulder erosion repaired. Not sure if any changes or repairs were done to the pipe itself. (DWR Sutter Yard-AFreitag)11/7/2016 LS erosion still a problem at the LS shoulder. (DWR Sutter Yard- AFreitag)6/6/2016 LS erosion still present and appears to be getting worse. It is only a few inches away from affecting the paved road way. (DWR Sutter Yard - afreitag)4/4/2016 Same as last inspection. Erosion problem is urgently in need of repair. (DWR UCIP - kfazel)4/6/2015 Erosion problem still present near the LS shoulder. If it gets any worse then it may start to affect the road way. Found a siphon breaker on LS. Antenna and pump station on WS. Huge erosion on LS slope. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 Erosion near LS shoulder may start affecting the roadway if it gets any worse.12/12/2012 Found a siphon breaker on LS. Antenna and pump station on WS. Huge erosion on LS slope. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: 24-inch asphalt coated steel irrigation pipe, 4 feet below the crown. Slant pump on a steel platform on the waterside (WS) berm. Siphon breaker on the apex of the pipe and off the levee crown on the landside (LS). 2 shut-off (butterfly) valves off the LS toe. Power pole with electrical conduit and panel on the LS toe. Pipe appears to run diagonally through the levee and discharges into a ditch off the LS toe. Gate structure on the outlet at the ditch. (Automatic Board Order (ABO) issued as Permit No. 9501, 1974 - Mayfair Farms, Inc.). Slant pump installed under Permit No. 10935, 1975 - Pires. [Additional Reference(s): DWR Levee Log, 2002]. FS Date: 4/26/2017 1:01:23 PM

Photo 3 of 3 : UCIP\_FA\_2018\_51677\_47096.jpg

Waterside view: inclined pipes

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	4.75	Rating **	М	Issue No.		105	
LM End	4.76	Issue Type +	Ma	Location *	WS		
Catagory Earthen Levee			GPS La	atituc	le/Longitude		
Category			Start		End		
Item	Vegetation			39.2135	09°	39.213665°	
пеш				-121.991993 °		-121.992220°	
DWR ID	DWR_ST0	003_01_f _ 201	6_105				
		Comn	nent Coo	le			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
	Inspector Comment						

No Photos

LM Start	5.03	Rating **	М	Issue No.		152
LM End	5.03	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Category				Start		End
Item	DWR UC	IP Field Study		39.21494	9°	39.214949°
пеш				-121.99698	0°	-121.996980°
DWR ID	17287					

#### Comment Code

## Inspector Comment

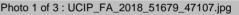
FS\_ID:51679 DS\_ID:17287 EP\_NO: 9520

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/24/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/7/2016 appears abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)6/6/2016 Appears to be an abandoned crossing.4/6/2015 Same as last inspection. Still appears abandoned. A concrete standpipe and a CMP riser on WS. It seems abandoned and if so should be done so properly.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 17 feet below the crown, not found in 2015. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope, found in 2015. Pump on the WS bank and concrete standpipe on the WS berm, found in 2015. 18-inch concrete pipe from standpipe at WS toe. Pipe discharges into a field on the landside (LS), not found in 2015. (24-inch pipe [HLM 4.99] authorized under Automatic Board Order (ABO) issued as Permit No. 9520, 1974 - Arnold). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 4.99)].

FS Date: 4/26/2017 1:07:37 PM





Waterside view: overview

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.03	Rating **	M	Issue No.	152 (cont)			
LM End	5.03	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	gory		Start		End			
Item	DWR UCI	P Field Study		39.21494	9°	39.214949°		
пеш						-121.996980°		
DWR ID	17287							

# Inspector Comment

Comment Code

FS ID:51679 DS\_ID:17287 EP\_NO: 9520

LM End

5.03

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/24/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/7/2016 appears abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)6/6/2016 Appears to be an abandoned crossing.4/6/2015 Same as last inspection. Still appears abandoned. A concrete standpipe and a CMP riser on WS. It seems abandoned and if so should be done so properly.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection.

FIELD STRUCT DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 17 feet below the crown, not found in 2015. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope, found in 2015. Pump on the WS bank and concrete standpipe on the WS berm, found in 2015, 18-inch concrete pipe from standpipe at WS toe. Pipe discharges into a field on the landside (LS), not found in 2015. (24-inch pipe [HLM 4.99] authorized under Automatic Board Order (ABO) issued as Permit No. 9520, 1974 -Arnold). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 4.99)]. FS Date: 4/26/2017 1:07:37 PM

En

Location '

5.03 Rating \*\* М Issue No. 152 (cont) LM Start

Issue Type +

Photo 2 of 3: UCIP\_FA\_2018\_51679\_47106.jpg



Waterside view: CMP riser with slide gate

Photo 3 of 3: UCIP\_FA\_2018\_51679\_47105.jpg



Waterside view: inside CMP riser

\* Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR: Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.04	Rating **	М	Issue No.		153
LM End	5.04	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory	egory			Start		End
Item	DWR UCI	P Field Study		39.2149	54°	39.214954°
пеш				-121.9970	14°	-121.997014°
DWR ID	17288					

#### Inspector Comment

Comment Code

FS\_ID:51680 DS\_ID:17288 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/24/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/7/2016 Appears abandoned, Should be done so properly. (DWR Sutter Yard- AFreitag)6/6/2016 Appears to be an abandoned crossing.4/4/2016 If abandoned, should be done so properly.4/6/2015 Same as last inspection. Only WS riser amd slide gate found. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as

last inspection.
FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 13.8 feet below the crown, not found in 2015. Slide gate in a CMP riser on the waterside (WS) slope, found in 2015. Flap gate removed at the landside (LS) end. (Automatic Board Order (ABO) issued as Permit No. 9520, 1974 - Arnold). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M

Manual 136, March 1960 (HLM 4.99)]. FS Date: 4/26/2017 1:19:25 PM

LM Start	5.04	Rating **	М	Issue No.	153 (cont)
LM End	5.04	Issue Type +	En	Location *	



Waterside view: CMP riser with slide gate (right)

Photo 2 of 3: UCIP\_FA\_2018\_51680\_47111.jpg



Waterside view: CMP riser with slide gate

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated C: Corrected M: Minimally Acceptable U: Unacceptable AW: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.04	Rating **	М	Issue No.		153 (cont)
LM End	5.04	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start	End	
Item	DWR UCI	P Field Study		39.2149	54°	39.214954°
пеш				-121.997014°		-121.997014°
DWR ID	17288					
Comment Code						

#### Inspector Comment

FS\_ID:51680 DS\_ID:17288 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/24/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/7/2016 Appears abandoned, Should be done so properly. (DWR Sutter Yard-AFreitag)6/6/2016 Appears to be an abandoned crossing.4/4/2016 If abandoned, should be done so properly.4/6/2015 Same as last inspection. Only WS riser amd slide gate found. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection 12/30/2013 Same

inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 13.8 feet below the crown, not found in 2015. Slide gate in a CMP riser on the waterside (WS) slope, found in 2015. Flap gate removed at the landside (LS) end. (Automatic Board Order (ABO) issued as Permit No. 9520, 1974 - Arnold). [Additional References): DWR Levee Log, 2002. USACE Sacramento O&M

Manual 136, March 1960 (HLM 4.99)]. FS Date: 4/26/2017 1:19:25 PM



Landside view: overview- county road and road drainpipe

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.04	Rating **	М	Issue No.		154	
LM End	5.04	Issue Type +	En	Location *			
Category	Suppleme	lemental		GPS La	le/Longitude		
Calegory				Start End			
Item	DWR UCI	P Field Study		39.2149	70°	39.214970°	
пеш				-121.997177 ° -121.997			
DWR ID	R ID 17289						
Comment Code							

#### Inspector Comment

FS\_ID:51681 DS\_ID:17289 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Appears abandoned- needs to be done so properly. Sloughing still present near WS surge box. (DWR Sutter Yard- AFreitag)11/7/2016 Appears abandoned but needs to be done so properly. (DWR Sutter Yard- AFreitag)6/6/2016 Sink holes appear to have been repaired but there is still some minor sloughing around the WS surge box. Surge box was full of water at time of inspection and I could not see the pipe inside to see if it still looked corroded and rusty.4/4/2016 Could not find sink holes as in 07/2013 photo. Appears repaired, but sloughing still present around surge box. Need confirmation that pipe was abandoned properly.4/6/2015 Repairs are in progress to this crossing. Surge box on WS and distribution box across the county road on LS. Abandoned pump station and electrical panel on WS. A concrete pump pit on WS.6/30/2014 Sink hole near WS surge box is still present. Portable pumps were lowered down the WS bank and were pumping water directly into WS standpipe on to by pass the surge box.12/30/2013 Sink Hole above pipe on WS still present. Pipe end inside of WS surge box shows heavy signs of rust and corrosion. Recommend having an internal camera inspection completed on pipe.7/29/2013 Portable tow-pump lowered down WS berm to water level and is pupming water into concrete surge box on WS and the filling the irrigation ditch on LS. Sink hole with standing water that is present above the outlet pipe for the WS surge box. This may indicate a leaking pipe or cracked concrete. FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal

irrigation pipe through the levee, 18.4 feet below the crown, not found in 2016. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) shoulder, found in 2016. Pump and concrete pump pit on the WS bank, found in 2013. Concrete surge box on the WS berm, found in 2016. Pipe discharges into an irrigation ditch on the landside (LS). (Levee Log references Permit No. 2904, 1958 - Butte Creek Farms, Inc. This permit authorizes an existing pump house and makes no mention of this pipe and its appurtenances). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M

Manual 136, March 1960 (HLM 5.00)] FS Date: 4/26/2017 1:20:24 PM



Waterside view: overview

# Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.04	Rating **	М	Issue No.		154 (cont)	
LM End	5.04	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		39.21497	o°	39.214970°	
пеш				-121.99717	7°	-121.997177°	
DWR ID	17289				·	·	

# Inspector Comment

Comment Code

FS\_ID:51681 DS\_ID:17289 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Appears abandoned- needs to be done so properly. Sloughing still present near WS surge box. (DWR Sutter Yard- AFreitag)11/7/2016 Appears abandoned but needs to be done so properly. (DWR Sutter Yard- AFreitag)6/6/2016 Sink holes appear to have been repaired but there is still some minor sloughing around the WS surge box. Surge box was full of water at time of inspection and I could not see the pipe inside to see if it still looked corroded and rusty.4/4/2016 Could not find sink holes as in 07/2013 photo. Appears repaired, but sloughing still present around surge box. Need confirmation that pipe was abandoned properly.4/6/2015 Repairs are in progress to this crossing. Surge box on WS and distribution box across the county road on LS. Abandoned pump station and electrical panel on WS. A concrete pump pit on WS.6/30/2014 Sink hole near WS surge box is still present. Portable pumps were lowered down the WS bank and were pumping water directly into WS standpipe on to by pass the surge box.12/30/2013 Sink Hole above pipe on WS still present. Pipe end inside of WS surge box shows heavy signs of rust and corrosion. Recommend having an internal camera inspection completed on pipe.7/29/2013 Portable tow-pump lowered down WS berm to water level and is pupming water into concrete surge box on WS and the filling the irrigation ditch on LS. Sink hole with standing water that is present above the outlet pipe for the WS surge box. This may indicate a leaking pipe or cracked concrete. FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal

irrigation pipe through the levee, 18.4 feet below the crown, not found in 2016. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) shoulder, found in 2016. Pump and concrete pump pit on the WS bank, found in 2013. Concrete surge box on the WS berm, found in 2016. Pipe discharges into an irrigation ditch on the landside (LS). (Levee Log references Permit No. 2904, 1958 - Butte Creek Farms, Inc. This permit authorizes an existing pump house and makes no mention of this pipe and its appurtenances). [Additional Perference(s): DWR Levee Log. 2002. USACE Sagramento Q&M

Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 5.00)]

FS Date: 4/26/2017 1:20:24 PM



Waterside view: CMP riser and surge box

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.04	Rating **	М	Issue No.	154 (cont)		
LM End	5.04	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.2149	70°	39.214970°	
item				-121.997177° -121.9971			
DWR ID	WR ID 17289						
Comment Code							

# Inspector Comment

FS\_ID:51681 DS\_ID:17289 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Appears abandoned- needs to be done so properly. Sloughing still present near WS surge box. (DWR Sutter Yard- AFreitag)11/7/2016 Appears abandoned but needs to be done so properly. (DWR Sutter Yard- AFreitag)6/6/2016 Sink holes appear to have been repaired but there is still some minor sloughing around the WS surge box. Surge box was full of water at time of inspection and I could not see the pipe inside to see if it still looked corroded and rusty.4/4/2016 Could not find sink holes as in 07/2013 photo. Appears repaired, but sloughing still present around surge box. Need confirmation that pipe was abandoned properly.4/6/2015 Repairs are in progress to this crossing. Surge box on WS and distribution box across the county road on LS. Abandoned pump station and electrical panel on WS. A concrete pump pit on WS.6/30/2014 Sink hole near WS surge box is still present. Portable pumps were lowered down the WS bank and were pumping water directly into WS standpipe on to by pass the surge box.12/30/2013 Sink Hole above pipe on WS still present. Pipe end inside of WS surge box shows heavy signs of rust and corrosion. Recommend having an internal camera inspection completed on pipe.7/29/2013 Portable tow-pump lowered down WS berm to water level and is pupming water into concrete surge box on WS and the filling the irrigation ditch on LS. Sink hole with standing water that is present above the outlet pipe for the WS surge box. This may indicate a leaking pipe or cracked concrete.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal irrigation pipe through the levee, 18.4 feet below the crown, not found in 2016. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) shoulder, found in 2016. Pump and concrete pump pit on the WS bank, found in 2013. Concrete surge box on the WS berm, found in 2016. Pipe discharges into an irrigation ditch on the landside (LS). (Levee Log references Permit No. 2904, 1958 - Butte Creek Farms, Inc. This permit authorizes an existing pump house and makes no mention of this pipe and its appurtenances). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M

Manual 136, March 1960 (HLM 5.00)] FS Date: 4/26/2017 1:20:24 PM

#### Photo 3 of 3: UCIP\_FA\_2018\_51681\_47114.jpg



Waterside view: closer look at surge box

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.15	Rating **	** M Issue No. <b>155</b>			155	
LM End	5.15	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	P Field Study		39.2154	)9°	39.215409°	
item			-121.9990	61 °	-121.999061°		
DWR ID	17291						
Comment Code							

# Inspector Comment

FS\_ID:51683 DS\_ID:17291 EP\_NO: 4091

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)6/6/2016 Appears to be an abandoned crossing. WS was to over grown with vegetation to access the area where the WS pump structure was previously found.4/6/2015 Same as last inspection. Crossing appears abandoned. Appears abandoned and if so should be done so properly. No Siphon breaker found on LS.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch asphalt coated steel irrigation pipe through the levee, 4 feet below the crown. Pump on the waterside (WS) bank. Gate valve in a concrete pipe riser on the WS shoulder. (Permit No. 4091, 1962 - Halsey, Yerxa). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 4/26/2017 1:30:30 PM

LM Start	5.15	Rating **	М	Issue No.	155 (cont)
LM End	5.15	Issue Type +	En	Location *	



Waterside view: concrete pipe riser with gate valve

#### Photo 2 of 3: UCIP\_FA\_2018\_51683\_47126.jpg



Waterside view: burried gate valve in concrete pipe riser

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.15	Rating **	М	Issue No.		155 (cont)
LM End	5.15	Issue Type +	En	Location *		
Category	Suppleme	Supplemental			tituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	WR UCIP Field Study			9°	39.215409°
item			-121.99906	61 °	-121.999061°	
DWR ID	17291					

# Inspector Comment

Comment Code

FS\_ID:51683 DS\_ID:17291 EP\_NO: 4091

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/7/2016 Abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)6/6/2016 Appears to be an abandoned crossing. WS was to over grown with vegetation to access the area where the WS pump structure was previously found.4/6/2015 Same as last inspection. Crossing appears abandoned. Appears abandoned and if so should be done so properly. No Siphon breaker found on LS.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch asphalt coated steel irrigation pipe through the levee, 4 feet below the crown. Pump on the waterside (WS) bank. Gate valve in a concrete pipe riser on the WS shoulder. (Permit No. 4091, 1962 - Halsey, Yerxa). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 4/26/2017 1:30:30 PM



Waterside view: abandoned pump station.

LM Start	5.32	5.32 Rating ** M		Issue No.		102	
LM End	5.32	Issue Type +	En	Location * LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory	Category			Start		End	
Item	Encroachments			39.2165	16°	39.216516	٥
пеш				-122.001852 °		-122.001852	٥
DWR ID	DWR_ST00	003_01_f _ 2010	6_102				
		Comn	nent Coo	le			
EQ : Equip	EQ : Equipment						
	Inspector Comment						

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	5.42	Rating **	М	Issue No.		87	
LM End	5.42	Issue Type +	En	Location *		LS	
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachi	ments		39.2170	17°	39.217017°	
item				-122.0035	27°	-122.003527°	
DWR ID	DWR_ST00	003_01_f _ 2018	8_87				
		Comn	nent Cod	de			
DE : Debri	S						
		Inspecto	or Comm	nent			
Remove the prunings and garbage from the landside toe.							



View of the prunings and garbage along the landside toe.

LM Start	5.42	Rating ** M		Issue No.		100
LM End	5.42	Issue Type +	En	Location *		LS
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Encroach	ments		39.2170	47°	39.217047°
item				-122.0036	32 °	-122.003632°
DWR ID DWR_ST0003_01_f _ 2016_100						
Comment Code						

EQ: Equipment

Inspector Comment



View of the ag equipment along the landside toe.

LM Start	6.38	Rating **	М	Issue No.		118		
LM End	6.38	Issue Type +	En	Location *		LS		
Category	Catagory Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End		
Item	Encroach	ments		39.2235	55°	39.223555	0	
пеш		-121.9990	35°	-121.999035	0			
DWR ID DWR_ST0003_01_s _ 2017_118								
	Comment Code							

PR: Prunings

Inspector Comment

Remove the prunings from the landside toe.



View of the prunings at the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	6.40	Rating **	М	Issue No.		156
LM End	6.40	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UCI	P Field Study		39.2237	96°	39.223796°
item			-121.9990 <sup>-</sup>	14°	-121.999014°	
DWR ID	17306					·

#### Inspector Comment

Comment Code

FS\_ID:51688 DS\_ID:17306 EP\_NO: 9530

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/16/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. (DWR Sutter Yard- Afreitag)6/1/2016 Appears to be an abandoned crossing. WS end is about 90% buried with soil and the LS end is still unknown.4/1/2015 WS pipe end 3/4 blocked by soil. LS end is still unknown.Pipe outlet on WS partially burried, it needs cleaning.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 30-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (30-inch pipe [HLM 6.37] authorized under Automatic Board Order (ABO) issued as Permit No. 9530, 1974 - Halsey). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 4/26/2017 1:45:14 PM

LM Start	6.40	Rating **	М	Issue No.	156 (cont)
LM End	6.40	Issue Type +	En	Location *	



Waterside view: CMP riser with slide gate

#### Photo 2 of 3: UCIP\_FA\_2018\_51688\_47156.jpg



Waterside view: inside CMP riser

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	6.40	Rating **	М	Issue No.		156 (cont)
LM End	6.40	Issue Type +	En	Location *		
Catagony	ental	GPS La	titud	e/Longitude		
Calegory	Category					End
Item	DWR UCI	P Field Study		39.2237	96°	39.223796°
item			-121.9990	14°	-121.999014°	
DWR ID	17306					·

# Inspector Comment

Comment Code

FS\_ID:51688 DS\_ID:17306 EP\_NO: 9530

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/16/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. (DWR Sutter Yard- Afreitag)6/1/2016 Appears to be an abandoned crossing. WS end is about 90% buried with soil and the LS end is still unknown.4/1/2015 WS pipe end 3/4 blocked by soil. LS end is still unknown.Pipe outlet on WS partially burried, it needs cleaning.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 30-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (30-inch pipe [HLM 6.37] authorized under Automatic Board Order (ABO) issued as Permit No. 9530, 1974 - Halsey). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 4/26/2017 1:45:14 PM



Waterside view: partially burried steel pipe

LM Start	6.47	Rating **	М	Issue No.		99		
LM End	6.47	Issue Type +	Ma	Location *		LS		
Category	evee	GPS La	atitud	e/Longitude				
Category			Start		End			
Item	Vegetatio	n		39.2247	19°	39.224719°		
пеш				-121.9986	23 °	-121.998623°		
DWR ID	VR ID DWR_ST0003_01_f _ 2016_99							
	Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



View of the overgrown vegetation along the landside slope.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	6.47	Rating **	М	Issue No.		106			
LM End	6.47	Issue Type +	Ma	Location *	LS				
Catagoni Earthen Levee				GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Encroachi	ments		39.2248	12°	39.224812°			
пеш				-121.9986	15°	-121.998615°			
DWR ID DWR_ST0003_01_s _ 2018_106									
		Comn	nent Cod	de					
TR : Tree	or limb								
		Inspecto	or Comm	nent					
Remove the down tree from the landside slope.									
·									



View of the downed tree along the landside slope.

LM Start	6.51	Rating **	М	Issue No.				
LM End	6.51	Issue Type +	En	Location *	LS			
Category	GPS La	atitud	e/Longitude					
Calegory	ategory					End		
Item	Encroachi	39.2253	07°	39.225307	, 0			
item				-121.9987	'55 °	-121.998755	, 0	
DWR ID	DWR_ST00	003_01_f _ 2016	5_98					
		Comn	nent Coc	le				
EQ : Equipment								

l-----

Inspector Comment



View of the ag equipment along the landside toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	6.64	Rating **	М	Issue No.		157
LM End	6.64	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory						End
Item	DWR UCI	P Field Study		39.22699	1°	39.226991 °
пеш			-121.99990	7°	-121.999907°	
DWR ID	17296					·

#### Inspector Comment

Comment Code

FS\_ID:51689 DS\_ID:17296 EP\_NO: 9530

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned- only WS riser and screwgate found.4/1/2015 Only cmp riser with screwgate found on WS. Screwgate stem is bent. Appears abandoned and should be verified as having been done so properly. Only CMP riser with slide gate found on WS6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown, not found in 2015. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope, found in 2015. (24-inch pipe [HLM 6.61] authorized under Automatic Board Order (ABO) issued as Permit No. 9530, 1974 - Halsey). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 6.61)]. FS Date: 4/26/2017 1:50:06 PM

 LM Start
 6.64
 Rating \*\*
 M
 Issue No.
 157 (cont)

 LM End
 6.64
 Issue Type +
 En
 Location \*



Waterside view: CMP riser with slide gate



Waterside view: inside CMP riser

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	6.75	Rating **	М	Issue No.		97	
LM End	6.75	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		39.2282	91°	39.228291	
item				-121.998579 °		79° -121.998579°	
DWR ID	DWR_ST0	003_01_f _ 2010	6_97				
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comm	nent			

No Photos

Rating \*\* Issue No. 6.76 М 136 LM Start 6.79 Issue Type + Ма Location \* WS LM End Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 39.228311° 39.228730° Item -121.998555° -121.998109 ° DWR\_ST0003\_01\_f \_ 2017\_136 DWR ID Comment Code

No Photos

## Inspector Comment

Levee Evaluation Comments

Description: Site ID No:11

Site Designation:DWR\_ST0003\_01\_s\_2012\_30

Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: Rodent activity seems to be the source of the problem. Local runoff/rainfall eroded the rodent holes to an advanced state of erosion that could continue with future exposure to wet conditions. Simple fix for the issue would be to grout the holes. Problem levee is a set-back levee.

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	6.92	Rating **	М	Issue No.		158	
LM End	6.92	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	P Field Study		39.2296	70°	39.229670	٥
item				-121.9963	13°	-121.996313	0
DWR ID	17298						

Comment Code

Inspector Comment

FS\_ID:51691 DS\_ID:17298 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/19/2017 Unable to locate. (DWR Sutter Yard-AFreitag)10/31/2016 Unable to locate. (DWR Sutter Yard-Afreitag)6/1/2016 Unable to locate.4/1/2015 Unable to locate. Need to determine status of crossing. 6/30/2014 Unable to locate.12/18/2013 Unable to locate.7/23/2013 Same as last inspection. Unable to locate.

FIELD\_STRUCT\_DESC: 2.5-inch gas pipeline of an unknown material through the levee, 1 foot below the crown. Gas storage tanks on the landside (LS). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 4/26/2017 2:27:22 PM

No Photos

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	7.58	Rating **	М	Issue No.		159	
LM End	7.58	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory						End	
Item	DWR UCI	P Field Study		39.2381	53°	39.238153 °	
пеш				-121.99502	24°	-121.995024°	
DWR ID	17300						

#### Inspector Comment

Comment Code

FS ID:51694 DS\_ID:17300 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag) 10/31/2016 Abandoned (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned4/1/2015 Only cmp riser and slide gate found on WS. Abandoned riser with slide gate on WS. Abandoned concrete surge box on WS. Verify pipe has been abandoned properly. 6/30/2014 Same as last

inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD STRUCT DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 14.5 feet below the crown, not found in 2015. Slide gate in a concrete surge box on the waterside (WS) berm, found in 2015. Slide gate in a corrugated metal pipe (CMP) riser, found in 2015. Pump on the WS slope, not found in 2015. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 7.61)].

FS Date: 4/26/2017 2:37:43 PM

LM Start	7.58	Rating **	М	Issue No.	159 (cont)
LM End	7.58	Issue Type +	En	Location *	



Waterside view: overview

Photo 2 of 3: UCIP\_FA\_2018\_51694\_47188.jpg



Waterside view: CMP riser with slide gate

Location + Issue Type Ma : Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	7.58	Rating **	M	Issue No.		159 (cont)
LM End	7.58	Issue Type +	En	Location *		
Category	Suppleme	emental GPS Latitude/Longit				e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.23815	3°	39.238153°
пеш				-121.99502	4 °	-121.995024°
DWR ID	17300					·

# Comment Code Inspector Comment

FS\_ID:51694 DS\_ID:17300 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned4/1/2015 Only cmp riser and slide gate found on WS. Abandoned riser with slide gate on WS. Abandoned concrete surge box on WS. Verify pipe has been abandoned properly. 6/30/2014 Same as last

inspection.12/18/2013 Same as last inspection.7/23/2013 Same as

last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 14.5 feet below the crown, not found in 2015. Slide gate in a concrete surge box on the waterside (WS) berm, found in 2015. Slide gate in a corrugated metal pipe (CMP) riser, found in 2015. Pump on the WS slope, not found in 2015. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 7.61)].

FS Date: 4/26/2017 2:37:43 PM



Waterside view: abandoned concrete surge box

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	7.72	Rating **	М	Issue No.		160
LM End	7.72	Issue Type +	Ma	Location *		
Category	Suppleme	GPS La	atitud	le/Longitude		
Calegory						End
Item	DWR UCI	P LMA Respo	onsibility	39.2394	58°	39.239458°
пеш				-121.9933	98°	-121.993398°
DWR ID	17301					

# Inspector Comment

Comment Code

FS\_ID:51695 DS\_ID:17301 EP\_NO: 9532

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- erosion/depression present around the WS box (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned and erosion still present near WS box.(DWR Sutter Yard-Afreitag)6/1/2016 Appears to be an abandoned crossing.4/1/2015 Silted concrete box on WS. Depression/erosion around concrete box on WS.Silted concrete box on WS. Depression/erosion around concrete box on WS.6/30/2014 Same as last inspection.1/2/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch by 48-inch reinforced concrete box drainage culvert through the levee, 11.6 feet below the crown. Slide gate in a concrete box on the waterside (WS) slope. (3-foot by 4-foot culvert [HLM 7.73] authorized under Automatic Board Order (ABO) issued as Permit No. 9532, 1974 - Martin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 7.73)].
FS Date: 4/26/2017 2:38:29 PM

 LM Start
 7.72
 Rating \*\*
 M
 Issue No.
 160 (cont)

 LM End
 7.72
 Issue Type +
 Ma
 Location \*

# Photo 1 of 3 : UCIP\_FA\_2018\_51695\_77008.jpg



Depression around WS concrete box

## Photo 2 of 3: UCIP\_FA\_2018\_51695\_77009.jpg



depression around WS concrete box

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	7.72	Rating **	М	Issue No.		160 (cont)
LM End	7.72	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory		Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.23945	8°	39.239458°
пеш				-121.99339	8°	-121.993398°
DWR ID	17301					

# Inspector Comment

Comment Code

FS\_ID:51695 DS\_ID:17301 EP\_NO: 9532

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- erosion/depression present around the WS box (DWR Sutter Yard- AFreitag)10/31/2016
Abandoned and erosion still present near WS box.(DWR Sutter Yard- Afreitag)6/1/2016 Appears to be an abandoned crossing.4/1/2015
Silted concrete box on WS. Depression/erosion around concrete box on WS.Silted concrete box on WS. Depression/erosion around concrete box on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch by 48-inch reinforced concrete box drainage culvert through the levee, 11.6 feet below the crown. Slide gate in a concrete box on the waterside (WS) slope. (3-foot by 4-foot culvert [HLM 7.73] authorized under Automatic Board Order (ABO) issued as Permit No. 9532, 1974 - Martin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 7.73)].

FS Date: 4/26/2017 2:38:29 PM



WS concrete box full of silt.

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.32	Rating **	М	Issue No.		161	
LM End	8.32	Issue Type +	Ма	Location *			
Supplemental Supplemental				GPS Latitude/Long			
Calegory	Category					End	
Item	DWR UCI	P LMA Respo	nsibility	39.24631	7°	39.246317°	
пеш				-121.99882	5°	-121.998825°	
DWR ID	17304					·	

# Inspector Comment

Comment Code

FS ID:51698 DS\_ID:17304 EP\_NO: 9529

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag) 10/31/2016 Abandoned (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned- only WS riser and slide gate found.4/1/2015 CMP riser and slide gate on WS. LS distribution box is silted in. Looks abandoned. CMP riser with slide gate on WS. Concrete distribution box on LS- full with silt.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD STRUCT DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, invert 12.8 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete box at the landside (LS) toe. (24-inch pipe [HLM 8.35] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Company). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.35)].

FS Date: 4/26/2017 2:54:54 PM

LM Start	8.32	Rating **	М	Issue No.	161 (cont)
LM End	8.32	Issue Type +	Ма	Location *	

Photo 1 of 3: UCIP\_FA\_2018\_51698\_47202.jpg



Crown view: overview (both sides of the levee)

Photo 2 of 3: UCIP FA 2018 51698 47201.ipg



Waterside view: overview of CMP riser

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.32	Rating **	М	Issue No.		161 (cont)		
LM End	8.32	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCI	P LMA Respo	onsibility	39.24631	7°	39.246317°		
пеш				-121.99882	5 °	-121.998825 °		
DWR ID	17304							
	Comment Code							

#### Inspector Comment

FS\_ID:51698 DS\_ID:17304 EP\_NO: 9529

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned- only WS riser and slide gate found.4/1/2015 CMP riser and slide gate on WS. LS distribution box is silted in. Looks abandoned. CMP riser with slide gate on WS. Concrete distribution box on LS- full with silt.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, invert 12.8 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete box at the landside (LS) toe. (24-inch pipe [HLM 8.35] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Company). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.35)].

FS Date: 4/26/2017 2:54:54 PM



Landside view: overview of concrete box

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.38	Rating **	М	Issue No.		162
LM End	8.38	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCI	P Field Study		39.24709	98°	39.247098°
пеш	item				55 °	-121.999055 °
DWR ID	17338					

#### Inspector Comment

Comment Code

FS\_ID:51724 DS\_ID:17338 EP\_NO: N/A

2002].

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/19/2017 Still only LS airvent found. (DWR Sutter Yard- Afreitag)10/31/2016 Only the LS standpipe and airvent found.6/1/2016 Still only the vaccum breaker on LS shoulder visible.4/1/2015 Only vacuum breaker found on LS shoulder.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection. FIELD\_STRUCT\_DESC: Pipe of unknown diameter, purpose and material through the levee, at an unknown depth below the crown, not found. Vacuum breaker inside steel standpipe on the landside (LS) shoulder, found in 2015. [Additional Reference(s): DWR Levee Log,

FS Date: 5/1/2017 8:31:33 AM

LM Start	8.38	Rating **	М	Issue No.	162 (cont)
LM End	8.38	Issue Type +	En	Location *	



Waterside view: overview





Waterside view: vacuum breaker inside a steel pipe

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.38	Rating **	М	Issue No.		162 (cont)		
LM End	8.38	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UC	P Field Study		39.24709	8°	39.247098°		
пеш			-121.99905	5 °	-121.999055°			
DWR ID	17338							
Comment Code								

# Inspector Comment

FS\_ID:51724 DS\_ID:17338 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/19/2017 Still only LS airvent found. (DWR Sutter Yard- Afreitag)10/31/2016 Only the LS standpipe and airvent found.6/1/2016 Still only the vaccum breaker on LS shoulder visible.4/1/2015 Only vacuum breaker found on LS shoulder.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection. FIELD\_STRUCT\_DESC: Pipe of unknown diameter, purpose and material through the levee, at an unknown depth below the crown, not found. Vacuum breaker inside steel standpipe on the landside (LS) shoulder, found in 2015. [Additional Reference(s): DWR Levee Log,

2002]. FS Date: 5/1/2017 8:31:33 AM



Landside view: overview (no pipes)

# Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.		163		
LM End	8.52	Issue Type +	Ма	Location *				
Category			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.24912	25°	39.249125°		
пеш				-121.99903	81 °	-121.999031 °		
DWR ID	DWR ID 17295							
Comment Code								

#### Inspector Comment

FS\_ID:51725 DS\_ID:17295 EP\_NO: 9529

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard-Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)] FS Date: 5/1/2017 8:37:22 AM

Photo 1 of 3 : UCIP\_FA\_2018\_51725\_47208.jpg



Waterside view: overview of CMP riser

# Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.	163 (cont)		
LM End	8.52	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Category		Start		End			
Item	DWR UCIP LMA Responsibility		39.24912	25 °	39.249125°		
item			-121.99903	31 °	-121.999031 °		
DWR ID 17295							
Comment Code							

# Inspector Comment

FS\_ID:51725 DS\_ID:17295 EP\_NO: 9529

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard-Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)] FS Date: 5/1/2017 8:37:22 AM

Photo 2 of 3: UCIP\_FA\_2018\_51725\_47207.jpg



Landside view: overview (no pipes)

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.	163 (cont)		
LM End	8.52	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Category		Start		End			
Item	DWR UCIP LMA Responsibility		39.249125 °		39.249125°		
item				-121.9990	31 °	-121.999031 °	
DWR ID 17295							

#### Inspector Comment

Comment Code

FS\_ID:51725 DS\_ID:17295 EP\_NO: 9529

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard-Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)] FS Date: 5/1/2017 8:37:22 AM



WS pipe end

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.56	Rating **	М	Issue No.		164
LM End	8.56	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.24967	'8°	39.249678°
пеш				-121.99902	21 °	-121.999021 °
DWR ID	17327					

# Inspector Comment

Comment Code

FS\_ID:51726 DS\_ID:17327 EP\_NO: 9528

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected by Nor-Cal Pipeline Services on

10/29/2015. Pipe length through levee is 75.1ft long. The inspection showed some signs of rust but no holes or other deterioration were found. Pics of exposed pipe ends were uploaded on 4/1/2015. After the inspection the pipe ends were capped and reburied.4/14/2016-Same as last inspection.4/1/2015- Both ends of pipe have been dug up in preparation for internal camera inspections. Pipe shows some rust but appears to be in decent shape. Only buried slide gate structure found.6/30/2014- Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 12.5 feet below the crown. Slide gate on the waterside (WS). (Automatic Board Order (ABO) issued as Permit No. 9528, 1974 - Lamb). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.59)]. FS Date: 5/1/2017 8:51:02 AM

LM Start	8.56	Rating **	М	Issue No.	164 (cont)
LM End	8.56	Issue Type +	Ma	Location *	



Waterside view: overview

Photo 2 of 3: UCIP\_FA\_2018\_51726\_47209.jpg



Waterside view: burried slide gate

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.56	Rating **	М	Issue No.		164 (cont)
LM End	8.56	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.24967	8 °	39.249678 °
пеш				-121.99902	1 °	-121.999021 °
DWR ID	17327					·

### Inspector Comment

Comment Code

FS\_ID:51726 DS\_ID:17327 EP\_NO: 9528

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected by Nor-Cal Pipeline Services on

10/29/2015. Pipe length through levee is 75.1ft long. The inspection showed some signs of rust but no holes or other deterioration were found. Pics of exposed pipe ends were uploaded on 4/1/2015. After the inspection the pipe ends were capped and reburied.4/14/2016-Same as last inspection.4/1/2015- Both ends of pipe have been dug up in preparation for internal camera inspections. Pipe shows some rust but appears to be in decent shape. Only buried slide gate structure found.6/30/2014- Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 12.5 feet below the crown. Slide gate on the waterside (WS). (Automatic Board Order (ABO) issued as Permit No. 9528, 1974 - Lamb). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.59)]. FS Date: 5/1/2017 8:51:02 AM



WS pipe end

LM Start	8.59	Rating **	М	Issue No.		112
LM End	8.59	Issue Type +	En	Location *		LS
Category	evee	GPS La	atitud	e/Longitude		
Calegory	Category					End
Item	Encroach	ments		39.250190°		39.250190°
пеш				-121.9988	58°	-121.998858°
DWR ID	DWR_ST0	003_01_s _ 201	8_112			
Comment Code						
PR : Pruni	ngs					

### Inspector Comment

Remove the prunings from the landside toe.

### Photo 1 of 1: FA\_2018\_ST0003\_264\_112\_20180905\_00026.jpg



View of the prunings along the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.65	Rating **	М	Issue No.		94		
LM End	8.65	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		39.2507	74°	39.250774	۰	
пеш				-121.9982	42°	-121.998242	٥	
DWR ID	DWR_ST00	003_01_f _ 2010	6_94					
		Comn	nent Cod	de				
TR : Tree	or limb							
		Inspecto	or Comm	nent				

No Photos

LM Start	8.70	Rating **	М	Issue No.		165	
LM End	8.70	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.25150	)4°	39.251504	0
пеш				-121.99787	79°	-121.997879	0
DWR ID	17352						

### Comment Code

### Inspector Comment

FS\_ID:51728 DS\_ID:17352 EP\_NO: 9523

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Abandoned crossing.4/14/2016 Appears abandoned and if so, should be done so properly. Borrowing activity on landside (LS).8/28/2015 Pipe has been dug up and located along the WS levee toe.6/30/2014 Unable to locate.12/18/2013 Unable to locate.7/23/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch concrete encased steel drainage pipe through the levee, invert 15 feet below the crown, not found in 2016. Gate valve in a 42-inch corrugated metal pipe riser on the waterside (WS) slope, found in 2016. (10-inch pipe [HLM 8.7] authorized under Automatic Board Order (ABO) issued as Permit No. 9523, 1974 - Blackmorth dditional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.7)].

FS Date: 5/1/2017 8:59:37 AM



View of LS

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.70	Rating **	М	Issue No.		165 (cont)	
LM End	8.70	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.2515	04°	39.251504°	
item				-121.9978	79°	-121.997879°	
DWR ID 17352							

# Inspector Comment

Comment Code

FS\_ID:51728 DS\_ID:17352 EP\_NO: 9523

Repair Type: Non-Urgent Crossing Status: Indicator Found

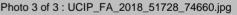
UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Abandoned crossing.4/14/2016 Appears abandoned and if so, should be done so properly. Borrowing activity on landside (LS).8/28/2015 Pipe has been dug up and located along the WS levee toe.6/30/2014 Unable to locate.12/18/2013 Unable to locate.7/23/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch concrete encased steel drainage pipe through the levee, invert 15 feet below the crown, not found in 2016. Gate valve in a 42-inch corrugated metal pipe riser on the waterside (WS) slope, found in 2016. (10-inch pipe [HLM 8.7] authorized under Automatic Board Order (ABO) issued as Permit No. 9523, 1974 - Blackmor@dditional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.7)].

FS Date: 5/1/2017 8:59:37 AM

LM Start	8.70	Rating **	М	Issue No.	165 (cont)
LM End	8.70	Issue Type +	En	Location *	



42-inch riser on WS shoulder.





View from crown of levee looking downstream.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
D: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.75	Rating **	U	Issue No.		166	
LM End	8.75	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory		Start		End			
Item	DWR UC	P Field Study		39.2521	21 °	39.252121°	
item				-121.9977	40 °	-121.997740°	
DWR ID	17353						
	Comment Code						

# Inspector Comment

FS\_ID:53402 DS\_ID:17353 EP\_NO: 4491 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; could not find LS pipe end so recommend internal pipe inspection. Crossing to remain Urgent (D. Sanoski - DWR UCIP).4/19/2017 4in. pipe still showing signs of deterioration near WS toe. (DWR Sutter Yard-Afreitag)10/31/2016 Pipe still exposed along the WS toe and is rusted and corroded. If it is still in use by the owner then it should be rebuilt.(DWR Sutter Yard- Afreitag)6/13/2016 Pipe was dug up on WS and photographed. It was originally selected for internal inspection but was unable to be as there was no access to the inside of the 4" pipe. (DWR Sutter Yard - afreitag)4/14/2016 Signs of corrosion on pipe and valve on LS. Pipe in use according to Bryan Reniff of Sutter Yard. (DWR UCIP - kfazel)8/28/2015 Pipe was dug up and located on the WS levee toe. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/18/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/11/2012 Only abandoned slide gate found on WS. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: 4-inch steel drainage pipe sleeved through 24inch corrugated metal pipe through the levee. 16.7 feet below the

crown. Annular space has been pressure grouted. Slide gate on the waterside (WS) end. Gate valve at the landside (LS) toe. (Permit No. 4491, 1964 - Blackmore). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.74)].



Waterside view: overview of slide gate on steel structure (belongs to crossing at CLM-8.782)

FS Date: 8/30/2018 4:27:57 PM

# Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.75	Rating **	U	Issue No.	166 (cont)		
LM End	8.75	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.25212	1°	39.252121°	
пеш				-121.99774	o°	-121.997740°	
DWR ID	17353						
	Comment Code						

### Inspector Comment

FS\_ID:53402 DS\_ID:17353 EP\_NO: 4491 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; could not find LS pipe end so recommend internal pipe inspection. Crossing to remain Urgent (D. Sanoski - DWR UCIP).4/19/2017 4in. pipe still showing signs of deterioration near WS toe. (DWR Sutter Yard-Afreitag)10/31/2016 Pipe still exposed along the WS toe and is rusted and corroded. If it is still in use by the owner then it should be rebuilt.(DWR Sutter Yard- Afreitag)6/13/2016 Pipe was dug up on WS and photographed. It was originally selected for internal inspection but was unable to be as there was no access to the inside of the 4" pipe. (DWR Sutter Yard - afreitag)4/14/2016 Signs of corrosion on pipe and valve on LS. Pipe in use according to Bryan Reniff of Sutter Yard. (DWR UCIP - kfazel)8/28/2015 Pipe was dug up and located on the WS levee toe. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag) 12/18/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/11/2012 Only abandoned slide gate found on WS. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: 4-inch steel drainage pipe sleeved through 24inch corrugated metal pipe through the levee. 16.7 feet below the

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Waterside view: slide gate on steel structure (belongs to crossing at CLM-8.782)

FS Date: 8/30/2018 4:27:57 PM

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.75	Rating **	U	Issue No.	166 (cont)		
LM End	8.75	Issue Type +	En	Location *			
Category Supplemental GPS Latitude/Longitude						de/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.25212	21 °	39.252121°	
пеш				-121.99774	o°	-121.997740°	
DWR ID	17353						
	Comment Code						

### Inspector Comment

FS\_ID:53402 DS\_ID:17353 EP\_NO: 4491 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; could not find LS pipe end so recommend internal pipe inspection. Crossing to remain Urgent (D. Sanoski - DWR UCIP).4/19/2017 4in. pipe still showing signs of deterioration near WS toe. (DWR Sutter Yard-Afreitag)10/31/2016 Pipe still exposed along the WS toe and is rusted and corroded. If it is still in use by the owner then it should be rebuilt.(DWR Sutter Yard- Afreitag)6/13/2016 Pipe was dug up on WS and photographed. It was originally selected for internal inspection but was unable to be as there was no access to the inside of the 4" pipe. (DWR Sutter Yard - afreitag)4/14/2016 Signs of corrosion on pipe and valve on LS. Pipe in use according to Bryan Reniff of Sutter Yard. (DWR UCIP - kfazel)8/28/2015 Pipe was dug up and located on the WS levee toe. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/18/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/11/2012 Only abandoned slide gate found on WS. (DWR UCIP - pamatya) FIELD\_STRUCT\_DESC: 4-inch steel drainage pipe sleeved through 24inch corrugated metal pipe through the levee. 16.7 feet below the crown. Annular space has been pressure grouted. Slide gate on the waterside (WS) end. Gate valve at the landside (LS) toe. (Permit No. 4491, 1964 - Blackmore). [Additional Reference(s): DWR Levee Log,

2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.74)].



Waterside view: close view of slide gate (belongs to crossing at CLM-8.782)

FS Date: 8/30/2018 4:27:57 PM

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	8.75	Rating **	U	Issue No.		2		
LM End	8.75	Issue Type +	En	Location *	LS			
Catagoria Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End		
Item	Encroach	ments		39.2522	60°	39.252260°		
пеш				-121.997721°		-121.997721 °		
DWR ID	DWR ID DWR_ST0003_01_s _ 2012_2							
		Comn	nent Cod	de				
BU : Buildi	ng							
		Inspecto	or Comm	nent				



View of the building next to the toe of the levee.

LM Start	8.92	Rating **	N	Issue No.	92			
LM End	8.92	Issue Type +	Ma	Location *	LS			
Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Trim / Thi	n Trees		39.2545	63°	39.254563°		
пеш			-121.9974	93°	-121.997493°			
DWR ID	DWR_ST0	003_01_f _ 2010	6_92					
		Comn	nent Cod	de				
T5 : Tree s	stumps.							
	Inspector Comment							

No Photos

LM Start	9.03	Rating **	М	Issue No.		122	
LM End	9.03	Issue Type +	En	Location *		WS	
Category Earthen Levee				GPS L	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroach	ments		39.2561	40°	39.256140	0
item				-121.9977	'87 °	-121.997787	0
DWR ID	DWR_ST0	003_01_s _ 201	7_122				
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			

No Photos

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	9.03	Rating **	N	Issue No.		91			
LM End	9.03	Issue Type +	Ma	Location *		LS			
Cotogony	Earthen L	evee		GPS La	atitud	le/Longitude			
Category				Start		End			
Item	Trim / Thi	n Trees		39.2561	41 °	39.256141 °			
item				-121.997785°		-121.997785 °			
DWR ID	DWR_ST0	003_01_f _ 201	5_91	'					
		Comn	nent Cod	de					
T5 : Tree s	tumps.								
		Inspecto	or Comm	nent					
1									

No Photos

Issue No. Rating \*\* 9.17 Ν 90 LM Start 9.17 Issue Type + Ма Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 39.257688° 39.257688° Item -121.999331 -121.999331 ° DWR\_ST0003\_01\_f \_ 2016\_90 DWR ID Comment Code T5: Tree stumps.

Inspector Comment

No Photos

Rating \*\* Issue No. С LM Start 9.23 89 Location \* 9.23 Issue Type + En LS LM End GPS Latitude/Longitude Earthen Levee Category Start End Encroachments 39.257989° 39.257989° Item -122.000367° -122.000367 DWR ID DWR\_ST0003\_01\_f \_ 2016\_89 Comment Code

No Photos

PR: Prunings

CR : Crown

Inspector Comment

The prunings were removed from the landside toe.

\* Location LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	9.37	Rating **	A/W	Issue No.		167
LM End	9.37	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Category				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.2600	34°	39.260034°
пеш				-122.0009	70°	-122.000970 °
DWR ID	17355					

### Inspector Comment

Comment Code

FS\_ID:51731 DS\_ID:17355 EP\_NO: N/A

LM End

9.37

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected on 10/30/2015 by Nor-Cal Pipeline Services. WS cap was removed and 100.6ft of pipe were inspected starting from the WS opening. Inspection revealed rusting but no visible holes or other deterioration were found. Pipe was recapped after the inspection. This pipe is always visible so no new photos were taken during the inspection.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/1/2015 Pipe is in same condition. It has been selected for an internal camera inspection. New CMP pipe on WS capped with steel plate.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Slide gate on the landside (LS) headwall. Steel plate welded on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 9.4)]. FS Date: 5/1/2017 9:16:26 AM

LM Start 9.37 Rating \*\* A/W Issue No. 167 (cont)

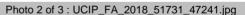
Ma

Location '

Issue Type +



Waterside view: overview





Waterside view: overview of CMP pipe

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

\*\* Rating

A : Not Applicable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	9.37	Rating **	A/W	Issue No.		167 (cont)
LM End	9.37	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory						End
Item	DWR UCI	P LMA Respo	nsibility	39.26003	4 °	39.260034°
пеш				-122.00097	o°	-122.000970 °
DWR ID	17355					

# Inspector Comment

Comment Code

FS\_ID:51731 DS\_ID:17355 EP\_NO: N/A

Repair Type: No Action Needed

Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected on 10/30/2015 by Nor-Cal Pipeline Services. WS cap was removed and 100.6ft of pipe were inspected starting from the WS opening. Inspection revealed rusting but no visible holes or other deterioration were found. Pipe was recapped after the inspection. This pipe is always visible so no new photos were taken during the inspection.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/1/2015 Pipe is in same condition. It has been selected for an internal camera inspection. New CMP pipe on WS capped with steel plate.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Slide gate on the landside (LS) headwall. Steel plate welded on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 9.4)].

FS Date: 5/1/2017 9:16:26 AM

# Photo 3 of 3 : UCIP\_FA\_2018\_51731\_47240.jpg

Waterside view: capped CMP pipe

LM Start	9.74	Rating **	М	Issue No.		113	
LM End	9.74	Issue Type +	En	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Encroach	ments		39.26474	10°	39.264740°	
item				-121.99828	88°	-121.998288°	
DWR ID	DWR_ST0003_01_s _ 2018_113						
Comment Code							

PR: Prunings

Inspector Comment

Remove the prunings from the landside toe.

### Photo 1 of 1: FA\_2018\_ST0003\_264\_113\_20180905\_00027.jpg



View of the prunings along the landside toe.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
D: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.32	Rating **	М	Issue No.		1				
LM End	10.41	Issue Type +	Ma	Location *	WS					
Category	Catagoni Supplemental					GPS Latitude/Longitude				
Category				Start		End				
Item		CE Erosion S	Survey,	39.3314	47 °	39.332716°				
пеш	DRAFT			-122.0294	40°	-122.029953 °				
DWR ID	ID DWR_ST0003_01_f _ 2018_1									
	Comment Code									

### Inspector Comment

2017 Site ID: SAC 157.7 R

Status: Eroding

2017 Field Notes: Vertical face of clay sand bank, new tree popout.

Bank continues to erode.

Site History: 2004 - Slowly eroding but near vertical with no vegetation to hold it. 2005 - Erosion is close to levee toe but not into the levee section yet. 2010 - Some new toe scour.



USACE 2013 Photo #1

LM Start	10.35	Rating **	A/W	Issue No.		168	
LM End	10.35	Issue Type +	Ma	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.2704	92°	39.270492°	
пеш				-122.0013	06°	-122.001306°	
DWR ID	17358						
Comment Code							

### Inspector Comment

FS\_ID:51734 DS\_ID:17358 EP NO: 9517

Repair Type: No Action Needed

Crossing Status: Found

UCIP Comments: 4/19/2017 No WS end found/ slide gate handle broken. (DWR Sutter Yard- Afreitag)10/31/2016 Slide gate handle is broken and no WS pipe end can be located. (DWR Sutter Yard-Afreitag)6/1/2016 WS slide gate handle is still broken. No WS pipe end was found.4/1/2015 Slide gate handle is still broken. The rest of the pipe appears in good condition. Broken slide gate handle found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Slide gate in a concrete distribution box on the landside (LS) toe. (48-inch pipe [HLM 10.39] authorized under Automatic Board Order (ABO) issued as Permit No. 9517, 1974 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.47)].

FS Date: 5/1/2017 9:32:45 AM

### Photo 1 of 3: UCIP\_FA\_2018\_51734\_47263.jpg



Crown view: overview (both sides of the levee)

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.35	Rating **	A/W	Issue No.		168 (cont)
LM End	10.35	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.27049	2°	39.270492°
пеш				-122.00130	6°	-122.001306°
DWR ID	17358					

### Inspector Comment

Comment Code

FS\_ID:51734 DS\_ID:17358 EP\_NO: 9517

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 No WS end found/ slide gate handle broken. (DWR Sutter Yard-Afreitag)10/31/2016 Slide gate handle is broken and no WS pipe end can be located. (DWR Sutter Yard-Afreitag)6/1/2016 WS slide gate handle is still broken. No WS pipe end was found.4/1/2015 Slide gate handle is still broken. The rest of the pipe appears in good condition. Broken slide gate handle found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Slide gate in a concrete distribution box on the landside (LS) toe. (48-inch pipe [HLM 10.39] authorized under Automatic Board Order (ABO) issued as Permit No. 9517, 1974 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.47)].

FS Date: 5/1/2017 9:32:45 AM

LM Start	10.35	Rating **	A/W	Issue No.	168 (cont)
LM End	10.35	Issue Type +	Ma	Location *	



Waterside view: overview of CMP riser



# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.36	Rating **	М	Issue No.		5	
LM End	10.36	Issue Type +	Ma	Location *		LS	
Earthen Levee			GPS L	atitud	e/Longitude		
Category				Start		End	
Item	Vegetation				603°	39.270503	0
пеш				-122.0013	39°	-122.001339	0
DWR ID	DWR_ST0	003_01_s _ 201	2_5				
		Comn	nent Cod	de			
V4 : Elderb	perries are	blocking visib	ility and	flood fight	сара	bility.	
	Inspector Comment						
The Elderb	erry is pai	tially blocking	visibility	<b>'</b> .			

No Photos

LM Start	10.51	Rating **	М	Issue No.		169
LM End	10.51	Issue Type +	En	Location *		
Category	ental	GPS La	titud	e/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.2719	28°	39.271928°
item				-122.0034	22 °	-122.003422°
DWR ID	17371					

# Inspector Comment

Comment Code

FS\_ID:51735 DS\_ID:17371 EP\_NO: 9517

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned crossing.4/2/2015 Same as last inspection. Need to verify type of abandonment. Pump house not found on waterside of the levee. Looks abandoned as switch panel found without pump.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection. FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel irrigation pipe through the levee, 17.1 feet below the crown. Gate valve and flap gate in a concrete distribution box. Water meter in a corrugated metal pipe (CMP) riser at the landside (LS) toe. Gate valve in a CMP on the waterside (WS). Pipe was replaced in November 2005. (Automatic Board Order (ABO) issued as Permit No. 9517, 1974 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.53)].



Waterside view: CMP riser and abandoned service pole

FS Date: 5/1/2017 9:39:39 AM

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.51	Rating **	M	Issue No.		169 (cont)
LM End	10.51	Issue Type +	En	Location *		
Category	Supplemental			GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.27192	8°	39.271928°
пеш				-122.00342	2°	-122.003422 °
DWR ID	17371					·

# Comment Code

Inspector Comment

FS\_ID:51735 DS\_ID:17371 EP\_NO: 9517

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned crossing.4/2/2015 Same as last inspection. Need to verify type of abandonment. Pump house not found on waterside of the levee. Looks abandoned as switch panel found without pump.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection. FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel irrigation pipe through the levee, 17.1 feet below the crown. Gate valve and flap gate in a concrete distribution box. Water meter in a corrugated metal pipe (CMP) riser at the landside (LS) toe. Gate valve in a CMP on the waterside (WS). Pipe was replaced in November 2005. (Automatic Board Order (ABO) issued as Permit No. 9517, 1974 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.53)]. FS Date: 5/1/2017 9:39:39 AM

LM Start	10.51	Rating **	М	Issue No.	169 (cont)
LM End	10.51	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_51735\_47269.jpg

Waterside view: CMP riser with gate valve

### Photo 3 of 3: UCIP\_FA\_2018\_51735\_47273.jpg



Waterside view: abandoned pump station.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.69	Rating **	М	Issue No.		170
LM End	10.69	Issue Type +	En	Location *		
Category	ental	GPS La	atitud	le/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.2740	90°	39.274090°
пеш			-122.0052	63°	-122.005263 °	
DWR ID 17350						

# Inspector Comment

Comment Code

FS\_ID:51737 DS\_ID:17350 EP\_NO: 1369

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Appears abandoned. (DWR Sutter Yard- AFreitag)6/1/2016 Appears to be an abandoned crossing.4/2/2015 Same as last inspection. Looks abandoned and if so should be done so properly. Pump and switch panel not found. Outlet pipe blocked by silt and debris.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch steel irrigation pipe through the levee, 4 feet below the crown. Siphon breaker on the landside (LS) slope. Concrete distribution box on the LS toe. (Permit No. 1369, 1949 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.68)]. FS Date: 5/1/2017 9:44:43 AM

LM Start	10.69	Rating **	М	Issue No.	170 (cont)
LM End	10.69	Issue Type +	En	Location *	



Crown view: overview (both sides of the levee)

Photo 2 of 3: UCIP FA 2018 51737 47283.ipg



Waterside view: overview of exposed steel pipe

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	10.69	Rating **	М	Issue No.		170 (cont)
LM End	10.69	Issue Type +	En	Location *		
Category	ental	GPS La	tituc	le/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.2740	90°	39.274090°
item			-122.0052	63 °	-122.005263 °	
DWR ID 17350						

### Inspector Comment

Comment Code

FS\_ID:51737 DS\_ID:17350 EP\_NO: 1369

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Appears abandoned. (DWR Sutter Yard- AFreitag)6/1/2016 Appears to be an abandoned crossing.4/2/2015 Same as last inspection. Looks abandoned and if so should be done so properly. Pump and switch panel not found. Outlet pipe blocked by silt and debris.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch steel irrigation pipe through the levee, 4 feet below the crown. Siphon breaker on the landside (LS) slope. Concrete distribution box on the LS toe. (Permit No. 1369, 1949 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.68)]. FS Date: 5/1/2017 9:44:43 AM



Waterside view: beyond exposed steel pipe (not accessible)

LM Start	11.53	Rating **	М	Issue No.		8		
LM End	11.79	Issue Type +	Ma	Location *		WS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory		Start		End				
Item		CE Erosion S	Survey,	39.2799	10°	39.283853°		
пеш	DRAFT			-122.0182	21 °	-122.016113°		
DWR ID	DWR_ST0	003_01_f _ 2018	8_8					

### Inspector Comment

Comment Code

2017 Site ID: SAC 152.6 L

Status: Eroding

2017 Field Notes: Access Issues - Could not observe
Site History: 2008 - Large rotational/mass failure in the bank with tree
slump. 2009 - Minimal new erosion, the tree is leaning further into the
river. 2011 - Site extended downstream. 2012 - Minor new erosion and
tree roots are further exposed.

Photo 1 of 1: FA\_2018\_ST0003\_264\_8\_20180905\_00006.jpg



USACE 2013 Photo #1

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	11.67	Rating **	М	Issue No.		6			
LM End	11.90	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroachi	ments		39.2820	64°	39.285084°			
пеш				-122.016517°		-122.014815°			
DWR ID	DWR ID DWR_ST0003_01_s _ 2012_6								
		Comn	nent Cod	de					
DT : Ditch									
		Inspecto	or Comm	nent					



View of the ditch along the landside toe.

LM Start	11.85	Rating **	М	Issue No.		13			
LM End	11.90	Issue Type +	Ma	Location *		WS			
Category	Suppleme	ental		GPS La	titud	le/Longitude			
Calegory				Start		End			
Item		CE Erosion S	Survey,	39.2845	68°	39.285298°			
item	DRAFT			-122.0156	90°	-122.015208°			
DWR ID DWR_ST0003_01_f _ 2018_13									
	Comment Code								

### Inspector Comment

2017 Site ID: SAC 152.8 L

Status: Eroding

2017 Field Notes: Minor new erosion observed.

Site History: 2006 - Large rotational/mass failure in the bank with tree slump. Tough clayey toe material. 2007 - Site is between stone revetments with a pump station at the downstream end. 2010 - Erosion is into the levee toe. 2011 - Minor new erosion. 2012 - Minor new erosion.

# Photo 1 of 1: FA\_2018\_ST0003\_264\_13\_20180905\_00010.jpg



USACE 2013 Photo #1

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

11.94	Rating **	М	Issue No.		7				
12.18	Issue Type +	En	Location *	LS					
Earthen L	evee		GPS La	atitud	e/Longitude				
			Start		End				
Encroach	ments		39.2856	58°	39.288978°				
			-122.0145	74°	-122.013892°				
DWR ID DWR_ST0003_01_s _ 2012_7									
	Comn	nent Cod	de						
	Inspecto	or Comm	nent						
	12.18 Earthen L Encroach	12.18 Issue Type + Earthen Levee Encroachments  DWR_ST0003_01_s _ 201  Comn	12.18 Issue Type + En  Earthen Levee  Encroachments  DWR_ST0003_01_s _ 2012_7  Comment Coc	12.18         Issue Type +         En         Location *           Earthen Levee         GPS L           Start         Start           Encroachments         39.2856           -122.0145	12.18   Issue Type +   En   Location *				



View of the ditch along the landside toe.

LM Start	12.06	Rating **	М	Issue No.		171			
LM End	12.06	Issue Type +	En	Location *					
Cotogony	Suppleme	ental		GPS Lat	itud	e/Longitude			
Calegory	Category		Category			Start		End	
Item	DWR UC	P Field Study		39.28725	1°	39.287251	0		
пеш				-122.01407	6°	-122.014076	0		
DWR ID	17365								

# Inspector Comment

Comment Code

FS\_ID:51743 DS\_ID:17365 EP\_NO: 9514

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Crossing appears to be in good condition. (DWR Sutter Yard- Afreitag)10/31/2016 Crossing appears to be in good condition.(DWR Sutter Yard- AFreitag)6/6/2016 Crossing appears to be in good condition. New wooden cover was made for WS surge tank.4/2/2015 Everything looked to be in good condition. Concrete surge tank still has some silting. Gate valve in CMP riser not visible. Flap gate in concrete distribution box on LS not visible/accessible. Looks like cleaning required inside concrete surge tank on WS due to silting.7/2/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Pump running and WS surge tank was full of water so not sure if silt was cleaned out. LS flap gate was visible and is in good condition. FIELD\_STRUCT\_DESC: 36-inch corrugated metal irrigation pipe through the levee, 18.1 feet below the crown. Pump house on the waterside (WS) slope. Gate valve in a corrugated metal riser on the WS toe. Flap gate in a concrete distribution box at the landside (LS) toe. (Automatic Board Order (ABO) issued as Permit No. 9514, 1974 -Boggs). [Additional Reference(s): Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.05)]. FS Date: 5/1/2017 9:57:28 AM

# Photo 1 of 3: UCIP\_FA\_2018\_51743\_47306.jpg



Waterside view: overview pipe, pump, surge box & CMP riser

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.06	Rating **	M	Issue No.		171 (cont)		
LM End	12.06	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR UCI	P Field Study		39.2872	51 °	39.287251°		
пеш			-122.0140	76°	-122.014076°			
DWR ID	17365					·		

### Inspector Comment

Comment Code

FS\_ID:51743 DS\_ID:17365 EP\_NO: 9514

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Crossing appears to be in good condition. (DWR Sutter Yard- Afreitag)10/31/2016 Crossing appears to be in good condition.(DWR Sutter Yard- AFreitag)6/6/2016 Crossing appears to be in good condition. New wooden cover was made for WS surge tank.4/2/2015 Everything looked to be in good condition. Concrete surge tank still has some silting. Gate valve in CMP riser not visible. Flap gate in concrete distribution box on LS not visible/accessible. Looks like cleaning required inside concrete surge tank on WS due to silting.7/2/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Pump running and WS surge tank was full of water so not sure if silt was cleaned out. LS flap gate was visible and is in good condition. FIELD STRUCT DESC: 36-inch corrugated metal irrigation pipe through the levee, 18.1 feet below the crown. Pump house on the waterside (WS) slope. Gate valve in a corrugated metal riser on the WS toe. Flap gate in a concrete distribution box at the landside (LS) toe. (Automatic Board Order (ABO) issued as Permit No. 9514, 1974 -Boggs). [Additional Reference(s): Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.05)]. FS Date: 5/1/2017 9:57:28 AM

LM Start	12.06	Rating **	М	Issue No.	171 (cont)
LM End	12.06	Issue Type +	En	Location *	



Waterside view: steel pipe, pump, surge box & CMP riser

Photo 3 of 3: UCIP FA 2018 51743 47304.jpg



Waterside view: pump switch box, surge box & CMP riser

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.43	Rating **	М	Issue No.		172		
LM End	12.43	Issue Type +	En	Location *				
Catagony	ental	GPS La	atitud	le/Longitude				
Calegory	Category					End		
Item	DWR UC	IP Field Study		39.2926	08°	39.292608°		
пеш				-122.0134	83°	-122.013483°		
DWR ID	R ID 17366							
	Comment Code							

# Inspector Comment

FS\_ID:51744 DS\_ID:17366 EP\_NO: 9513

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 2.5in. GI pipe was removed and replaced with a section of 2.5in. flexible hose that can easily be removed to allow the slide gate to fully close for high water season. (DWR Sutter Yard- Afreitag)10/31/2016 2.5in. pipe still blocking the screwgate. (DWR Sutter Yard- AFreitag)6/6/2016 2.5inch pipe still present through crossing. (DWR Sutter Yard - afreitag)4/14/2016 2.5-inch pipe still preventing slide gate from fully closing on WS. Recommend LMA contact owner to address removal of unauthorized 2.5-inch pipe. Owner must either contact CVFPB for permitting of 2.5-inch pipe or remove it. (DWR UCIP - kfazel)4/2/2015 2.5in pipe is still present and prevents the slide gate from fully closing. (DWR Sutter Yard afreitag)7/2/2014 2.5in. GI pipe and chain in WS surge box will prevent slide gate from closing fully for high water season. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 2.5in. GI pipe and chain in WS surge box will prevent slide gate from closing fully for high water season. (DWR Sutter Yard - afreitag)12/11/2012 A 2.5 inch GI pipe through 36 inch CMP found. A 2 inch electrical conduit also found. (DWR UCIP pamatva)

FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation pipe through the levee, invert 16.5 feet below the crown. Slide gate in a concrete surge box on the waterside (WS) berm. 2.5-inch pipe through the 24-inch pipe preventing closing of the slide gate on the WS. Slant pump on the riverbank. Concrete distribution box at the landside (LS) toe. 2-inch electrical conduit through the levee, visible on the WS adjacent to the walkway. (Automatic Board Order (ABO) issued as Permit No. 9513, 1974 - Boggs). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.42)].

FS Date: 5/1/2017 9:58:54 AM



Waterside view: overview of slanted pump and shed

# Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.43	Rating **	М	Issue No. 172 (cont)			
LM End	12.43	Issue Type +	En	Location *	cation *		
Category	Suppleme	GPS La	titud	le/Longitude			
Calegory			Start		End		
Item	DWR UCIP Field Study			39.29260	08°	39.292608°	
пеш			-122.01348	33°	-122.013483 °		
DWR ID	17366						
Comment Code							

# Inspector Comment

FS\_ID:51744 DS\_ID:17366 EP\_NO: 9513

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 2.5in. GI pipe was removed and replaced with a section of 2.5in. flexible hose that can easily be removed to allow the slide gate to fully close for high water season. (DWR Sutter Yard- Afreitag)10/31/2016 2.5in. pipe still blocking the screwgate. (DWR Sutter Yard- AFreitag)6/6/2016 2.5inch pipe still present through crossing. (DWR Sutter Yard - afreitag)4/14/2016 2.5-inch pipe still preventing slide gate from fully closing on WS. Recommend LMA contact owner to address removal of unauthorized 2.5-inch pipe. Owner must either contact CVFPB for permitting of 2.5-inch pipe or remove it. (DWR UCIP - kfazel)4/2/2015 2.5in pipe is still present and prevents the slide gate from fully closing. (DWR Sutter Yard afreitag)7/2/2014 2.5in. GI pipe and chain in WS surge box will prevent slide gate from closing fully for high water season. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 2.5in. GI pipe and chain in WS surge box will prevent slide gate from closing fully for high water season. (DWR Sutter Yard - afreitag)12/11/2012 A 2.5 inch GI pipe through 36 inch CMP found. A 2 inch electrical conduit also found. (DWR UCIP pamatva)

FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation pipe through the levee, invert 16.5 feet below the crown. Slide gate in a concrete surge box on the waterside (WS) berm. 2.5-inch pipe through the 24-inch pipe preventing closing of the slide gate on the WS. Slant pump on the riverbank. Concrete distribution box at the landside (LS) toe. 2-inch electrical conduit through the levee, visible on the WS adjacent to the walkway. (Automatic Board Order (ABO) issued as Permit No. 9513, 1974 - Boggs). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.42)].

FS Date: 5/1/2017 9:58:54 AM



Waterside view: pump station and walkway

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.43	Rating **	М	Issue No. 172 (cont)			
LM End	12.43	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS La	atitud	le/Longitude		
Calegory			Start		End		
Item	DWR UCI		39.2926	08°	39.292608°		
пеш				-122.013483 °		-122.013483 °	
DWR ID	17366						
Comment Code							

### Inspector Comment

FS\_ID:51744 DS\_ID:17366 EP\_NO: 9513

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 2.5in. GI pipe was removed and replaced with a section of 2.5in. flexible hose that can easily be removed to allow the slide gate to fully close for high water season. (DWR Sutter Yard- Afreitag)10/31/2016 2.5in. pipe still blocking the screwgate. (DWR Sutter Yard- AFreitag)6/6/2016 2.5inch pipe still present through crossing. (DWR Sutter Yard - afreitag)4/14/2016 2.5-inch pipe still preventing slide gate from fully closing on WS. Recommend LMA contact owner to address removal of unauthorized 2.5-inch pipe. Owner must either contact CVFPB for permitting of 2.5-inch pipe or remove it. (DWR UCIP - kfazel)4/2/2015 2.5in pipe is still present and prevents the slide gate from fully closing. (DWR Sutter Yard afreitag)7/2/2014 2.5in. GI pipe and chain in WS surge box will prevent slide gate from closing fully for high water season. (DWR Sutter Yard - afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/29/2013 2.5in. GI pipe and chain in WS surge box will prevent slide gate from closing fully for high water season. (DWR Sutter Yard - afreitag)12/11/2012 A 2.5 inch GI pipe through 36 inch CMP found. A 2 inch electrical conduit also found. (DWR UCIP pamatva)

FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation pipe through the levee, invert 16.5 feet below the crown. Slide gate in a concrete surge box on the waterside (WS) berm. 2.5-inch pipe through the 24-inch pipe preventing closing of the slide gate on the WS. Slant pump on the riverbank. Concrete distribution box at the landside (LS) toe. 2-inch electrical conduit through the levee, visible on the WS adjacent to the walkway. (Automatic Board Order (ABO) issued as Permit No. 9513, 1974 - Boggs). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.42)].

FS Date: 5/1/2017 9:58:54 AM



Waterside view: steel pipe, GI pipe in concrete surge box

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.56	Rating **	U	Issue No.	173	
LM End	12.56	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.29444	9°	39.294449°
пеш				-122.01387	1 °	-122.013871 °
DWR ID	17367					·

# Inspector Comment

Comment Code

FS ID:53403 DS ID:17367 EP\_NO: 2971 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; large sink hole/erosion around surge box on WS so crossing remains Urgent (D. Sanoski - DWR UCIP).4/20/2017 Sink hole behind the WS surge box got a lot bigger after the high water event of Jan/Feb 2017. Pipe also had a leak during that time buy not sure if it was due to the sink hole or a faulty slide gate. (DWR Sutter Yard- AFreitag)10/31/2016 No repairs have been made here yet. Sinkhole is still present at the WS surge box.(DWR Sutter Yard- AFreitag)6/6/2016 Pumps were connnected to intake pipes and pumping into the WS surge box. The deep sink hole above the surge box measures to be about 6'6" deep from the toe road surface and it appeared to be wet in the bottom indicating the cracks in the concrete may be letting water seep through and wash out the sediment behind the wall. The surge box was full of water so could not observe the sediment build up in the bottom of the box. (DWR Sutter Yard - afreitag)4/14/2016 Deep sink hole above surge box on WS, possibly caused by burrowing, possibly creating conduit for seepage into surge box, which may explain presence of water in box. Recommend pipe be video inspected. Recommend taking another photo in summer to observe possible sediment buildup in box. (DWR UCIP - kfazel)4/2/2015 Pipe has small leak during times of high water. Not sure of the cause. Pumps taken out from the pipe (may be for repairs). Only control board found. LS wing wall minor damage. (DWR Sutter Yard - afreitag)7/2/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/19/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Pump motors attatched to pipes and running. Think pumps were disconnected during last inspection to keep motors above water for high water season. (DWR Sutter Yard afreitag)12/11/2012 Pumps taken out from the pipe (may be for repairs). Only control board found. LS wing wall minor damage. (DWR UCIP - pamatya)

FIELD STRUCT DESC: 36-inch corrugated metal irrigation pipe through the levee, 20 feet below the crown. Concrete headwall on the landside (LS) with meter. Slide gate on the waterside (WS) end. Two slant pumps on the WS bank discharging into a concrete distribution box at the WS toe. Switch panel on the WS. (Permit No. 2971, 1959 -Sartain). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.55)]. FS Date: 8/30/2018 3:41:00 PM

Photo 1 of 3: UCIP\_FA\_2018\_53403\_47323.jpg



Waterside view: overview

# Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.56	Rating **	U	Issue No.	173 (cont)	
LM End	12.56	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.29444	9°	39.294449°
пеш				-122.01387	1°	-122.013871 °
DWR ID	17367					·

# Inspector Comment

Comment Code

FS\_ID:53403 DS\_ID:17367 EP\_NO: 2971 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; large sink hole/erosion around surge box on WS so crossing remains Urgent (D. Sanoski - DWR UCIP).4/20/2017 Sink hole behind the WS surge box got a lot bigger after the high water event of Jan/Feb 2017. Pipe also had a leak during that time buy not sure if it was due to the sink hole or a faulty slide gate. (DWR Sutter Yard- AFreitag)10/31/2016 No repairs have been made here yet. Sinkhole is still present at the WS surge box.(DWR Sutter Yard- AFreitag)6/6/2016 Pumps were connnected to intake pipes and pumping into the WS surge box. The deep sink hole above the surge box measures to be about 6'6" deep from the toe road surface and it appeared to be wet in the bottom indicating the cracks in the concrete may be letting water seep through and wash out the sediment behind the wall. The surge box was full of water so could not observe the sediment build up in the bottom of the box. (DWR Sutter Yard - afreitag)4/14/2016 Deep sink hole above surge box on WS, possibly caused by burrowing, possibly creating conduit for seepage into surge box, which may explain presence of water in box. Recommend pipe be video inspected. Recommend taking another photo in summer to observe possible sediment buildup in box. (DWR UCIP - kfazel)4/2/2015 Pipe has small leak during times of high water. Not sure of the cause. Pumps taken out from the pipe (may be for repairs). Only control board found. LS wing wall minor damage. (DWR Sutter Yard - afreitag)7/2/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/19/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Pump motors attatched to pipes and running. Think pumps were disconnected during last inspection to keep motors above water for high water season. (DWR Sutter Yard afreitag)12/11/2012 Pumps taken out from the pipe (may be for repairs). Only control board found. LS wing wall minor damage. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 36-inch corrugated metal irrigation pipe through the levee, 20 feet below the crown. Concrete headwall on the landside (LS) with meter. Slide gate on the waterside (WS) end. Two slant pumps on the WS bank discharging into a concrete distribution box at the WS toe. Switch panel on the WS. (Permit No. 2971, 1959 - Sartain). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.55)]. FS Date: 8/30/2018 3:41:00 PM



Waterside view: concrete surge box

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.56	Rating **	U	Issue No.		173 (cont)
LM End	12.56	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.29444	9°	39.294449°
пеш					'1 °	-122.013871 °
DWR ID	17367					

# Inspector Comment

Comment Code

FS ID:53403 DS ID:17367 EP NO: 2971 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; large sink hole/erosion around surge box on WS so crossing remains Urgent (D. Sanoski - DWR UCIP).4/20/2017 Sink hole behind the WS surge box got a lot bigger after the high water event of Jan/Feb 2017. Pipe also had a leak during that time buy not sure if it was due to the sink hole or a faulty slide gate. (DWR Sutter Yard- AFreitag)10/31/2016 No repairs have been made here yet. Sinkhole is still present at the WS surge box.(DWR Sutter Yard- AFreitag)6/6/2016 Pumps were connnected to intake pipes and pumping into the WS surge box. The deep sink hole above the surge box measures to be about 6'6" deep from the toe road surface and it appeared to be wet in the bottom indicating the cracks in the concrete may be letting water seep through and wash out the sediment behind the wall. The surge box was full of water so could not observe the sediment build up in the bottom of the box. (DWR Sutter Yard - afreitag)4/14/2016 Deep sink hole above surge box on WS, possibly caused by burrowing, possibly creating conduit for seepage into surge box, which may explain presence of water in box. Recommend pipe be video inspected. Recommend taking another photo in summer to observe possible sediment buildup in box. (DWR UCIP - kfazel)4/2/2015 Pipe has small leak during times of high water. Not sure of the cause. Pumps taken out from the pipe (may be for repairs). Only control board found. LS wing wall minor damage. (DWR Sutter Yard - afreitag)7/2/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/19/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Pump motors attatched to pipes and running. Think pumps were disconnected during last inspection to keep motors above water for high water season. (DWR Sutter Yard afreitag)12/11/2012 Pumps taken out from the pipe (may be for repairs). Only control board found. LS wing wall minor damage. (DWR UCIP - pamatya)

FIELD STRUCT DESC: 36-inch corrugated metal irrigation pipe through the levee, 20 feet below the crown. Concrete headwall on the landside (LS) with meter. Slide gate on the waterside (WS) end. Two slant pumps on the WS bank discharging into a concrete distribution box at the WS toe. Switch panel on the WS. (Permit No. 2971, 1959 -Sartain). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.55)]. FS Date: 8/30/2018 3:41:00 PM

Photo 3 of 3: UCIP\_FA\_2018\_53403\_47321.jpg



Waterside view: slide gate in concrete surge box

CR: Crown

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.70	Rating **	С	Issue No.		114	
LM End	12.70	Issue Type +	En	Location *		LS	
Category	Earthen L		GPS La	atitud	e/Longitude		
				Start		End	
Item	Encroachi	ncroachments			33 °	39.296433°	
item				-122.014347 °		-122.014347°	
DWR ID	DWR_ST00	003_01_s _ 201	8_114				
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			
The prunings were removed from the landside toe.							

No Photos

LM Start	12.74	Rating **	M	Issue No.		174	
LM End	12.74	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Category				Start		End	
Item	DWR UCI	IP Field Study		39.2969	65 °	39.296965	0
пеш				-122.0142	66°	-122.014266	0
DWR ID	17368						

# Comment Code

### Inspector Comment

FS\_ID:51747 DS\_ID:17368 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internaly cleaned and camera inspected on 11/5/2015 by Nor-Cal Pipeline Services. Pipe length is 86.7ft long. The is a possible sag in the pipe between the WS riser and LS end as we could not get all the water to drain or be sucked out after the cleaning was done. Internal inspection showed signs of some rusting but no visible holes or other deterioration were found. After the inspection pipe ends were capped and reburied. 4/14/2016 Same as last inspection. Heavy vegetation along WS slope, especially below WS berm, limits visibility.4/2/2015 WS and LS pipe ends have been dug up in preparation for internal camera inspections. Only CMP riser found.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch drainage pipe of an unknown material through the levee, 14 feet below the crown, not found in 2016. Slide gate in a corrugated metal pipe riser (CMP) on the waterside (WS) slope, found in 2016. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.73)].

FS Date: 5/1/2017 10:19:49 AM





View of landside from crown.

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.74	Rating **	M	Issue No.		Issue No.		Issue No.		174 (cont)
LM End	12.74	Issue Type +	En	Location *						
Category				GPS Latitude/Longitude						
Calegory				Start		End				
Item	DWR UCI	P Field Study		39.29696	65 °	39.296965°				
item			-122.014266 °		-122.014266 °					
DWR ID	17368									

### Inspector Comment

Comment Code

FS\_ID:51747 DS\_ID:17368 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internaly cleaned and camera inspected on 11/5/2015 by Nor-Cal Pipeline Services. Pipe length is 86.7ft long. The is a possible sag in the pipe between the WS riser and LS end as we could not get all the water to drain or be sucked out after the cleaning was done. Internal inspection showed signs of some rusting but no visible holes or other deterioration were found. After the inspection pipe ends were capped and reburied. 4/14/2016 Same as last inspection. Heavy vegetation along WS slope, especially below WS berm, limits visibility.4/2/2015 WS and LS pipe ends have been dug up in preparation for internal camera inspections. Only CMP riser found.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch drainage pipe of an unknown material through the levee, 14 feet below the crown, not found in 2016. Slide gate in a corrugated metal pipe riser (CMP) on the waterside (WS) slope, found in 2016. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.73)].

FS Date: 5/1/2017 10:19:49 AM

LM Start	12.74	Rating **	М	Issue No.	174 (cont)
LM End	12.74	Issue Type +	En	Location *	



WS view: 12-inch slide gate inside CMP riser on WS slope.

Photo 3 of 3: UCIP\_FA\_2018\_51747\_75077.jpg



WS: slide gate inside CMP riser.

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

\*\* Rating

A : Not Applicable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.85	Rating **	М	Issue No.		76			
LM End	12.85	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroach	ments		39.2985	82°	39.298582°			
пеш				-122.0141	05°	-122.014105°			
DWR ID DWR_ST0003_01_f _ 2016_76									
Comment Code									
EQ : Equip	ment								
	Inspector Comment								

Photo 1 of 1 : FA\_2018\_ST0003\_264\_76\_20180905\_00017.jpg



View of the ag equipment along the landside toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.96	Rating **	U	Issue No.		175		
LM End	12.96	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
Item	DWR UC	IP Field Study		39.3001	40°	39.300140°		
пеш				-122.0135	99°	-122.013599°		
DWR ID	17369							
Comment Code								

### Inspector Comment

FS\_ID:53404 DS\_ID:17369 EP\_NO: 9510 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; erosion at surge box so crossing remains Urgent (D. Sanoski - DWR UCIP).4/20/2017 Erosion hole at WS surge box has gotten worse after the Jan/Feb 2017 high water event. Pipe also leaked which is believed to be casued by the screwgate not fully closing. (DWR Sutter Yard-

AFreitag)10/31/2016 No repairs have been made here yet. Bad erosion stil present at the WS toe distribution box.(DWR Sutter Yard-AFreitag)6/3/2016 Bad erosion stil present all around the WS surge box. Pipes were flowing water at the time of inspection and the bottom of the erosion hole was wet and had standing water in it indicating a leak coming from the surge box. (DWR Sutter Yard -

afreitag)4/14/2016 Heavy scour still present around surge box on WS exposing pipe. Levee caved in and severly damaged around surge box. Erosion around CMP riser on WS cited previously not found. (DWR UCIP - kfazel)4/2/2015 Pipe leaks during high water. It is supected that the screw gate does not fully close and may need to be cleaned to allow it to close fully. (DWR Sutter Yard - afreitag)7/2/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/19/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Water was flowing from the WS to LS ditch. Not sure where water flow was originating. All erosion problems are still present. (DWR Sutter Yard - afreitag)12/10/2016 Soil erosion around CMP riser and surge concrete box on WS damaged due to overflow. Pump not found. Flap gate missing on WS concrete box. WS slope eroded. Structure might have

been used as drainage structure. This needs to be determined during routine inspection. (DWR UCIP - pamatya)
FIELD\_STRUCT\_DESC: 36-inch corrugated metal irrigation pipe through the levee, 18 feet below the crown. Slide gate in a 48-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope.
Concrete box on the WS. Pump mounted on the WS bank, not found in 2016. (Automatic Board Order (ABO) issued as Permit No. 9510, 1974 - Forry). [Additional Reference(s): DWR Levee Log, 2002. USACE

Sacramento O&M Manual 136, March 1960 (HLM 12.95)].

FS Date: 8/30/2018 3:42:00 PM

Photo 1 of 3: UCIP\_FA\_2018\_53404\_47336.jpg



Waterside view: CMP riser on levee slope.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.96	Rating **	U	Issue No.		175 (cont)
LM End	12.96	Issue Type +	En	Location *		
Category			GPS La	titud	e/Longitude	
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		39.30014	10°	39.300140°
пеш			-122.013599°		-122.013599°	
DWR ID	17369					·

### Inspector Comment

Comment Code

FS\_ID:53404 DS\_ID:17369 EP\_NO: 9510 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; erosion at surge box so crossing remains Urgent (D. Sanoski - DWR UCIP).4/20/2017 Erosion hole at WS surge box has gotten worse after the Jan/Feb 2017 high water event. Pipe also leaked which is believed to be casued by the screwgate not fully closing. (DWR Sutter Yard-

AFreitag)10/31/2016 No repairs have been made here yet. Bad erosion stil present at the WS toe distribution box.(DWR Sutter Yard-AFreitag)6/3/2016 Bad erosion stil present all around the WS surge box. Pipes were flowing water at the time of inspection and the bottom of the erosion hole was wet and had standing water in it indicating a leak coming from the surge box. (DWR Sutter Yard - afreitag)4/14/2016 Heavy scour still present around surge box on WS

exposing pipe. Levee caved in and severly damaged around surge box. Erosion around CMP riser on WS cited previously not found. (DWR UCIP - kfazel)4/2/2015 Pipe leaks during high water. It is supected that the screw gate does not fully close and may need to be cleaned to allow it to close fully. (DWR Sutter Yard - afreitag)7/2/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/19/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Water was flowing from the WS to LS ditch. Not sure where water flow was originating. All erosion problems are still present. (DWR Sutter Yard - afreitag)12/10/2016 Soil erosion around CMP riser and surge concrete box on WS damaged due to overflow. Pump not found. Flap gate missing on WS concrete box. WS slope eroded. Structure might have

been used as drainage structure. This needs to be determined during routine inspection. (DWR UCIP - pamatya)
FIELD\_STRUCT\_DESC: 36-inch corrugated metal irrigation pipe through the levee, 18 feet below the crown. Slide gate in a 48-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope.
Concrete box on the WS. Pump mounted on the WS bank, not found in 2016. (Automatic Board Order (ABO) issued as Permit No. 9510, 1974 - Forry). [Additional Reference(s): DWR Levee Log, 2002. USACE

Sacramento O&M Manual 136, March 1960 (HLM 12.95)].

FS Date: 8/30/2018 3:42:00 PM

Photo 2 of 3: UCIP\_FA\_2018\_53404\_47334.jpg



Waterside view: overview of concrete surge box

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	12.96	Rating **	U	Issue No.		Issue No.		Issue No.		Issue No.		175 (cont)
LM End	12.96	Issue Type +	En	Location *								
Supplemental				GPS Latitude/Longitude								
Category				Start		End						
Itom	DWR UCI	P Field Study		39.3001	40°	39.300140°						
Item				-122.0135	99°	-122.013599°						
DWR ID	17369											

### Inspector Comment

Comment Code

FS\_ID:53404 DS\_ID:17369 EP\_NO: 9510 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/30/2018 Same as last inspection; erosion at surge box so crossing remains Urgent (D. Sanoski - DWR UCIP).4/20/2017 Erosion hole at WS surge box has gotten worse after the Jan/Feb 2017 high water event. Pipe also leaked which is believed to be casued by the screwgate not fully closing. (DWR Sutter Yard-

AFreitag)10/31/2016 No repairs have been made here yet. Bad erosion stil present at the WS toe distribution box.(DWR Sutter Yard-AFreitag)6/3/2016 Bad erosion stil present all around the WS surge box. Pipes were flowing water at the time of inspection and the bottom of the erosion hole was wet and had standing water in it indicating a leak coming from the surge box. (DWR Sutter Yard -

afreitag)4/14/2016 Heavy scour still present around surge box on WS exposing pipe. Levee caved in and severly damaged around surge box. Erosion around CMP riser on WS cited previously not found. (DWR UCIP - kfazel)4/2/2015 Pipe leaks during high water. It is supected that the screw gate does not fully close and may need to be cleaned to allow it to close fully. (DWR Sutter Yard - afreitag)7/2/2014 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Water was flowing from the WS to LS ditch. Not sure where water flow was originating. All erosion problems are still present. (DWR Sutter Yard - afreitag)12/10/2016 Soil erosion around CMP riser and surge concrete

afreitag)12/10/2016 Soil erosion around CMP riser and surge concrete box on WS damaged due to overflow. Pump not found. Flap gate missing on WS concrete box. WS slope eroded. Structure might have been used as drainage structure. This needs to be determined during routine inspection. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 36-inch corrugated metal irrigation pipe through the levee, 18 feet below the crown. Slide gate in a 48-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete box on the WS. Pump mounted on the WS bank, not found in 2016. (Automatic Board Order (ABO) issued as Permit No. 9510, 1974-Forry). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 12.95)].

FS Date: 8/30/2018 3:42:00 PM



Waterside view: concrete surge box

# Levee Inspection Report By Mile - Fall 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.		176		
LM End	13.38	Issue Type +	Ma	Location *				
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
DWR UCIP LMA Responsibility				39.306065 °		39.306065°		
пеш				-122.0131	12°	-122.013112°		
DWR ID	17340							
Comment Code								

### Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection. Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM



Waterside view: CMP riser with slide gate

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.		176 (cont)		
LM End	13.38	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
DWR UCIP LMA Responsibility				39.306065 °		39.306065°		
пеш				-122.0131	12°	-122.013112°		
DWR ID	17340							
Comment Code								

### Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection.Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM



Waterside view: overview of CMP riser and outlet pipe

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.		176 (cont)		
LM End	13.38	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
DWR UCIP LMA Responsibility				39.306065 °		39.306065°		
пеш				-122.0131	12°	-122.013112°		
DWR ID	17340							
Comment Code								

### Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection.Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM

# Photo 3 of 3 : UCIP\_FA\_2018\_51749\_47341.jpg



Waterside view: silted concrete lined CMP outlet pipe

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.43	Rating **	М	Issue No.		75		
LM End	13.43	Issue Type +	Ма	Location *	WS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End			
Item	Slope Stability			39.3069	19°	39.306919°		
item				-122.013076 °		-122.013076°		
DWR ID DWR_ST0003_01_f _ 2016_75								
Comment Code								
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.								
Inspector Comment								

Photo 1 of 1: FA\_2018\_ST0003\_264\_75\_20180905\_00016.jpg



View of the slope instability along the waterside slope.

LM Start	13.77	Rating **	М	Issue No.		95		
LM End	13.77	Issue Type +	En	Location *	WS			
Catagory Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Encroachments Item				39.311710°		39.311710°		
пеш		-122.012885 °		-122.012885 °				
DWR ID DWR_ST0003_01_f _ 2018_95								
Comment Code								

# PR: Prunings

### Inspector Comment

Remove the prunings from the waterside toe.

# Photo 1 of 1: FA\_2018\_ST0003\_264\_95\_20181105\_00189.jpg



View of the prunings along the waterside toe.

## Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.93	Rating **	М	Issue No.		177	
LM End	13.93	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCI	P Field Study		39.3140	25 °	39.314025 °	
item			-122.0129	59°	-122.012959°		
DWR ID	17361					·	

#### Inspector Comment

Comment Code

FS\_ID:51750 DS\_ID:17361 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. WS pipe end buried. (DWR Sutter Yard- AFreitag)6/14/2016 WS pipe end was dug up for a internal camera inspection. The WS slide gate was sealed shut and would not open so the inspection was only done form the WS pipe end to the WS slide gate (33.1ft). The pipe showed some signs of heavy rusting but no visible holes or other signs of deterioration were found. After the inspection the WS pipe end was capped and reburied until further abandonment can be achieved.4/2/2015 Only CMP riser on WS. Pipe has been selected for internal camera inspection. Only CMP riser found on WS.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 16 feet below the crown, not found in 2015. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) end, found in 2015. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.92)].

FS Date: 5/1/2017 10:32:09 AM

LM Start	13.93	Rating **	М	Issue No.	177 (cont)
LM End	13.93	Issue Type +	En	Location *	



Waterside view: CMP riser with slide gate



Waterside view: inside CMP riser

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence C: Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	13.93	Rating **	M	Issue No.		177 (cont)
LM End	13.93	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		39.31402	25 °	39.314025 °
item		-122.0129	59°	-122.012959°		
DWR ID	17361					·

Comment Code

Inspector Comment

FS\_ID:51750 DS\_ID:17361 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. WS pipe end buried. (DWR Sutter Yard- AFreitag)6/14/2016 WS pipe end was dug up for a internal camera inspection. The WS slide gate was sealed shut and would not open so the inspection was only done form the WS pipe end to the WS slide gate (33.1ft). The pipe showed some signs of heavy rusting but no visible holes or other signs of deterioration were found. After the inspection the WS pipe end was capped and reburied until further abandonment can be achieved.4/2/2015 Only CMP riser on WS. Pipe has been selected for internal camera inspection. Only CMP riser found on WS.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 16 feet below the crown, not found in 2015. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) end, found in 2015. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.92)].

FS Date: 5/1/2017 10:32:09 AM



Landside view: overview- across the county road

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	14.50	Rating **	A/W	Issue No.		178		
LM End	14.50	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	P LMA Respo	nsibility	39.3214	29°	39.321429°		
пеш				-122.0160	79°	-122.016079°		
DWR ID	17330							
	Comment Code							

#### Inspector Comment

FS\_ID:51752 DS\_ID:17330 EP\_NO: 9508

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. WS pipe end buried. (DWR Sutter Yard-AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/17/2015 by Nor-Cal Pipeline Services. Pipe section through levee is 86ft long and showed some signs of rusting but no visible holes or other deterioration was found. After the inspection the WS end was capped and reburied until further abandonment can be achieved.4/14/2016 Concrete box on LS cleared of sediment.4/2/2015 Same as last inspection. Concrete box on LS silted in. If abandoned it should be done so properly.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

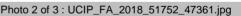
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). (24-inch pipe [HLM 14.5] authorized under Automatic Board Order (ABO) issued as Permit No. 9508, 1974 - Jones). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 14.5)]. FS Date: 5/1/2017 10:34:48 AM

 LM Start
 14.50
 Rating \*\*
 A/W
 Issue No.
 178 (cont)

 LM End
 14.50
 Issue Type +
 Ma
 Location \*



Waterside view: CMP riser with slide gate





Waterside view: levee mile marker

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	14.50	Rating **	A/W	Issue No.		178 (cont)		
LM End	14.50	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory	y			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.3214	29°	39.321429°		
пеш				-122.0160	79°	-122.016079°		
DWR ID 17330								
	Comment Code							

#### Inspector Comment

FS\_ID:51752 DS\_ID:17330 EP\_NO: 9508

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. WS pipe end buried. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/17/2015 by Nor-Cal Pipeline Services. Pipe section through levee is 86ft long and showed some signs of rusting but no visible holes or other deterioration was found. After the inspection the WS end was capped and reburied until further abandonment can be achieved.4/14/2016 Concrete box on LS cleared of sediment.4/2/2015 Same as last inspection. Concrete box on LS silted in. If abandoned it should be done so properly.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). (24-inch pipe [HLM 14.5] authorized under Automatic Board Order (ABO) issued as Permit No. 9508, 1974 - Jones). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 14.5)]. FS Date: 5/1/2017 10:34:48 AM

# Photo 3 of 3 : UCIP\_FA\_2018\_51752\_47360.jpg

Landside view: overview of distribution box

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	14.56	Rating **	М	Issue No.		Issue No.		179
LM End	14.56	Issue Type +	En	Location *				
Category			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Itom	DWR UCI	P Field Study		39.32227	79°	39.322279°		
Item			-122.01597	72 °	-122.015972°			
DWR ID	17331							

# Inspector Comment

Comment Code

FS ID:51753 DS\_ID:17331 EP\_NO: 1833

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 No leaky pipe marker present during this inspection but it appears that nothing has changed or was repaired since it was labled leaky in 2015. (DWR Sutter Yard-

AFreitag)10/31/2016 Leaky pipe marker was not present at inspection but nothing appears to have changed with this crossing. (DWR Sutter Yard- AFreitag)6/15/2016 No changes made to this crossing. Leaky pipe marker still present.4/14/2016 Levee slightly caved in one side of surge box on WS4/2/2015 Leaks during high water. Distribution box plugged with cement concrete on LS. Other concrete box plugged with concrete on WS. New steel pipe (about 16 inch diameter) sleeved through CMP pipe. It is visible inside CMP riser.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 42-inch corrugated metal irrigation pipe through the levee, 14.2 feet below the crown. 16-inch (approximate) pipe has been sleeved through the 42-inch corrugated metal pipe (CMP), with annular space pressure grouted. Pump structure on the waterside (WS) bank, not found in 2016. Concrete surge box at the WS toe. Slide gate in a CMP riser on the WS slope. Concrete distribution box on the landside (LS) across River Road. Phone number provided is 916-802-8293. (Permit No. 1833, 1953 - Carter). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M

Manual 136, March 1960 (HLM 14.55)]. FS Date: 5/1/2017 10:35:31 AM

Photo 1 of 3: UCIP\_FA\_2018\_51753\_47363.jpg



Waterside view: CMP riser with slide gate and surge box

# Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	14.56	Rating **	М	Issue No.	179 (cont)		
LM End	14.56	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.32227	79°	39.322279	•
пеш				-122.01597	72 °	-122.015972	0
DWR ID	17331						

#### Inspector Comment

Comment Code

FS\_ID:51753 DS\_ID:17331 EP\_NO: 1833

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 No leaky pipe marker present during this inspection but it appears that nothing has changed or was repaired since it was labled leaky in 2015. (DWR Sutter Yard-

AFreitag)10/31/2016 Leaky pipe marker was not present at inspection but nothing appears to have changed with this crossing. (DWR Sutter Yard- AFreitag)6/15/2016 No changes made to this crossing. Leaky pipe marker still present.4/14/2016 Levee slightly caved in one side of surge box on WS4/2/2015 Leaks during high water. Distribution box plugged with cement concrete on LS. Other concrete box plugged with concrete on WS. New steel pipe (about 16 inch diameter) sleeved through CMP pipe. It is visible inside CMP riser.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 42-inch corrugated metal irrigation pipe through the levee, 14.2 feet below the crown. 16-inch (approximate) pipe has been sleeved through the 42-inch corrugated metal pipe (CMP), with annular space pressure grouted. Pump structure on the waterside (WS) bank, not found in 2016. Concrete surge box at the WS toe. Slide gate in a CMP riser on the WS slope. Concrete distribution box on the landside (LS) across River Road. Phone number provided is 916-802-8293. (Permit No. 1833, 1953 - Carter). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M

Manual 136, March 1960 (HLM 14.55)]. FS Date: 5/1/2017 10:35:31 AM



Waterside view: new steel pipe sleeved through CMP pipe.

# Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	14.56	Rating **	M	Issue No.	179 (cont)	
LM End	14.56	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.32227	'9 °	39.322279°
пеш				-122.01597	'2 °	-122.015972°
DWR ID	17331					·

# Inspector Comment

Comment Code

FS\_ID:51753 DS\_ID:17331 EP\_NO: 1833

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 No leaky pipe marker present during this inspection but it appears that nothing has changed or was repaired since it was labled leaky in 2015. (DWR Sutter Yard-

AFreitag)10/31/2016 Leaky pipe marker was not present at inspection but nothing appears to have changed with this crossing. (DWR Sutter Yard- AFreitag)6/15/2016 No changes made to this crossing. Leaky pipe marker still present.4/14/2016 Levee slightly caved in one side of surge box on WS4/2/2015 Leaks during high water. Distribution box plugged with cement concrete on LS. Other concrete box plugged with concrete on WS. New steel pipe (about 16 inch diameter) sleeved through CMP pipe. It is visible inside CMP riser.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 42-inch corrugated metal irrigation pipe through the levee, 14.2 feet below the crown. 16-inch (approximate) pipe has been sleeved through the 42-inch corrugated metal pipe (CMP), with annular space pressure grouted. Pump structure on the waterside (WS) bank, not found in 2016. Concrete surge box at the WS toe. Slide gate in a CMP riser on the WS slope. Concrete distribution box on the landside (LS) across River Road. Phone number provided is 916-802-8293. (Permit No. 1833, 1953 - Carter). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 14.55)].

FS Date: 5/1/2017 10:35:31 AM



Waterside view: plugged concrete surge box

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	15.17	Rating **	М	Issue No.		71			
LM End	15.48	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroachments			39.3305	78°	39.333842°			
пеш				-122.018485°		5° -122.022225°			
DWR ID	DWR_ST0003_01_f _ 2016_71								
		Comn	nent Cod	de					
DT : Ditch									
Inspector Comment									



View of a ditch along the landside toe.

LM Start	15.48	Rating **	М	Issue No.	180		
LM End	15.48	Issue Type +	En	Location *			
Category	Suppleme	GPS La	titud	le/Longitude			
Calegory			Start		End		
Item	DWR UCIP Field Study			39.3338	68°	39.333868 °	
item				-122.0222	43 °	-122.022243 °	
DWR ID	17333						
Comment Code							

#### Inspector Comment

FS\_ID:51755 DS\_ID:17333 EP\_NO: 9506

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Both pipe ends were underwater during site visit but it appears to be in good condition. (DWR Sutter Yard-AFreitag)10/31/2016 Minor erosion caused by rain runoff starting at the top of the WS headwall. REst of crossing appears in good condition. (DWR Sutter Yard-AFreitag)6/15/2016 Both pipe ends were underwater but appear to be in good condition.4/2/2015 Pipe and ditches were full of water. Everything seemed to be in good shape.Water full on inlet and outlet of the structure.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013

FIELD\_STRUCT\_DESC: 24-inch irrigation pipe of an unknown material through the levee, 16.5 feet below the crown. Pump in the floodway. Irrigation transfer ditch on the waterside (WS) to concrete surge box at the WS toe. Slide gates in a corrugated metal pipe (CMP) riser on the WS slope. Discharges into a concrete distribution box at the landside (LS) toe. (Automatic Board Order (ABO) issued as Permit No. 9506, 1974 - Carter). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 15.46)]. FS Date: 5/1/2017 10:38:21 AM

#### Photo 1 of 3: UCIP\_FA\_2018\_51755\_47371.jpg



Crown view: overview (both sides of the levee)

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	15.48	Rating **	М	Issue No.		180 (cont)	
LM End	15.48	Issue Type +	En	Location *	*		
Category Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	P Field Study		39.3338	68°	39.333868°	
item				-122.0222	43 °	-122.022243 °	
DWR ID	17333						

# Inspector Comment

Comment Code

FS\_ID:51755 DS\_ID:17333 EP\_NO: 9506

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Both pipe ends were underwater during site visit but it appears to be in good condition. (DWR Sutter Yard-AFreitag)10/31/2016 Minor erosion caused by rain runoff starting at the top of the WS headwall. REst of crossing appears in good condition. (DWR Sutter Yard-AFreitag)6/15/2016 Both pipe ends were underwater but appear to be in good condition.4/2/2015 Pipe and ditches were full of water. Everything seemed to be in good shape.Water full on inlet and outlet of the structure.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch irrigation pipe of an unknown material through the levee, 16.5 feet below the crown. Pump in the floodway. Irrigation transfer ditch on the waterside (WS) to concrete surge box at the WS toe. Slide gates in a corrugated metal pipe (CMP) riser on the WS slope. Discharges into a concrete distribution box at the landside (LS) toe. (Automatic Board Order (ABO) issued as Permit No. 9506, 1974 - Carter). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 15.46)]. FS Date: 5/1/2017 10:38:21 AM

LM Start	15.48	Rating **	М	Issue No.	180 (cont)
LM End	15.48	Issue Type +	En	Location *	



Waterside view: CMP riser, inlet box and water transfer ditch



Waterside view: inside CMP riser

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	15.81	Rating **	М	Issue No.		181	
LM End	15.81	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.33802	29°	39.338029	0
item				-122.0227	1 °	-122.022711	0
DWR ID	17334						

Comment Code

Inspector Comment

FS\_ID:51756 DS\_ID:17334 EP\_NO: 2599

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/20/2017 Unable to locate. (DWR Sutter Yard-AFreitag)10/31/2016 Unable to locate. (DWR Sutter Yard-AFreitag)6/15/2016 Unable to locate.4/2/2015 Unable to locate. Need to contact owner to determine status and location of this crossing.

7/2/2014 Unable to locate.12/19/2013 Unable to locate.7/23/2013 Same as last inspection. Unable to locate.

FIELD\_STRUCT\_DESC: 2.375-inch unwrapped steel high pressure gas pipeline through the levee, 2.6 feet below the crown. (Permit No. 2599, 1957 - Honolulu Oil Corporation). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 5/1/2017 10:39:25 AM

No Photos

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.12	Rating **	М	Issue No.	182		
LM End	16.12	Issue Type +	En	Location *			
Supplemental				GPS Lat	itud	e/Longitude	
Calegory	Category					End	
Item	DWR UCIP Field Study				3°	39.341653	0
item				-122.02390	8°	-122.023908	0
DWR ID	17335						

Comment Code

Inspector Comment

FS\_ID:51757 DS\_ID:17335 EP\_NO: 2651

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/20/2017 Unable to locate. (DWR Sutter Yard-AFreitag)10/31/2016 Unable to locate. (DWR Sutter Yard-AFreitag)6/15/2016 Unable to locate.4/2/2015 Unable to locate. Need to contact owner to determine status and location of this crossing.

7/2/2014 Unable to locate.12/19/2013 Unable to locate7/23/2013 Same as last inspection. Unable to locate.

FIELD\_STRUCT\_DESC: 2.375-inch unwrapped steel high pressure gas pipeline through the levee, 2.6 feet below the crown. (Permit No. 2651, 1957 - Occidental Petroleum Corporation). [Additional Reference(s):

DWR Levee Log, 2002].

FS Date: 5/1/2017 10:39:59 AM

No Photos

# Levee Inspection Report By Mile - Fall 2018

#### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.21	Rating **	М	Issue No.	183	
LM End	16.21	Issue Type +	En	Location *		
Supplemental Supplemental				GPS La	titud	e/Longitude
Calegory	Category					End
ltom	. DWR UCIP Field Study			39.34290	)5 °	39.342905
Item			-122.0242	15°	-122.024215	
DWR ID	17336					1

Comment Code

Inspector Comment

FS\_ID:51758 DS\_ID:17336 EP\_NO: 2651

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/20/2017 Unable to locate. (DWR Sutter Yard-AFreitag)10/31/2016 Unable to locate. (DWR Sutter Yard-AFreitag)6/15/2016 Unable to locate.4/2/2015 Unable to locate. Need to contact owner to determine status and location of crossing.7/2/2014 Unable to locate.12/19/2013 Unable to locate7/23/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 2.375-inch unwrapped steel high pressure gas

pipeline through the levee, 2.5 feet below the crown. (Permit No. 2651, 1957 - Occidental Petroleum Corporation). [Additional Reference(s): DWR Levee Log, 2002]

FS Date: 5/1/2017 10:40:37 AM

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.30	Rating **	М	Issue No.		184		
LM End	16.30	Issue Type +	Ма	Location *				
Category				oplemental GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCIP LMA Responsibility			39.34417	77°	39.344177°		
пеш				-122.02430	00°	-122.024300 °		
DWR ID	17337							

#### Inspector Comment

Comment Code

FS\_ID:51759 DS\_ID:17337 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. Pipe is buried and not visible but a white marker on WS shoulder shows its location. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe section through the levee is 88ft long and showed signs of rusting but no holes or other deterioration was found. The WS flap gate was broken during excavation but doesnt pose an issue as the pipe was capped and reburied until further abandonment can be achieved. Unfortunately the pipe was not photographed when exposed.4/14/2016 Same as last inspection.4/2/2015 Unable to locate. Pipe has been selected to be dug up and internally camera inspected.7/2/2014 Unable to locate.12/19/2013 Unable to locate7/23/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 42-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Metal flap gate on the waterside (WS) silted over. Brick "U" shaped headwall on the WS toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 16.29)]. FS Date: 5/1/2017 10:41:07 AM

LM Start	16.30	Rating **	М	Issue No.	184 (cont)
LM End	16.30	Issue Type +	Ma	Location *	



View from crown down WS slope at location of crossing.

#### Photo 2 of 3: UCIP\_FA\_2018\_51759\_75097.jpg



View of LS from crown at location of crossing.

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

\*\* Rating

A : Not Applicable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.30	Rating **	М	Issue No.		184 (cont)
LM End	16.30	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category					End
Item	DWR UCIP LMA Responsibility			39.3441	77°	39.344177°
пеш				-122.02430	00°	-122.024300°
DWR ID	17337					·

# Inspector Comment

Comment Code

FS\_ID:51759 DS\_ID:17337 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. Pipe is buried and not visible but a white marker on WS shoulder shows its location. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe section through the levee is 88ft long and showed signs of rusting but no holes or other deterioration was found. The WS flap gate was broken during excavation but doesnt pose an issue as the pipe was capped and reburied until further abandonment can be achieved. Unfortunately the pipe was not photographed when exposed.4/14/2016 Same as last inspection.4/2/2015 Unable to locate. Pipe has been selected to be dug up and internally camera inspected.7/2/2014 Unable to locate.12/19/2013 Unable to locate7/23/2013 Same as last inspection. Unable to locate. FIELD STRUCT DESC: 42-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Metal flap gate on the waterside (WS) silted over. Brick "U" shaped headwall on the WS toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 16,29)]. FS Date: 5/1/2017 10:41:07 AM



Looking up WS slope: bare spot where pipe was previously excavated, video inspected, and backfilled.

# Levee Inspection Report By Mile - Fall 2018

#### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.43	Rating **	М	Issue No.		185
LM End	16.43	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory	ory .			Start		End
Item	DWR UCI	IP Field Study		39.34563	35 °	39.345635 °
item		•		-122.0229	ı5°	-122.022915 °
DWR ID	17349					·

#### Inspector Comment

Comment Code

FS ID:51760 DS\_ID:17349 EP\_NO: 9500

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/15/2016 Abandoned- WS slide gate and LS distribution box are silted over.4/16/2016 Same as last inspection. Appears abandoned and should be done so properly.4/2/2015 WS slide gate and LS distribution box are still silted over. Seems abandoned as slide gate and distribution box silted.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal irrigation and drainage pipe through the levee, 17 feet below the crown, not found in 2016. Slide gate on the waterside (WS), found in 2016. 8inch steel pipe sleeved through the 48-inch pipe during the summer months, not found in 2016. Discharges into a concrete distribution box on the landside (LS) toe. (Automatic Board Order (ABO) issued as Permit No. 9500, 1974 - Zumwalt Orchards, Inc.). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 16.42)].

FS Date: 5/1/2017 10:42:09 AM



Photo 1 of 3: UCIP\_FA\_2018\_51760\_47380.jpg

Waterside view: overview of slide gate

Photo 2 of 3: UCIP\_FA\_2018\_51760\_47379.jpg



Waterside view: slide gate on steel structure

Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR: Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.43	Rating **	М	Issue No.		185 (cont)		
LM End	16.43	Issue Type +	En	Location *				
Catagony	Category				GPS Latitude/Longitude			
Calegory						End		
Item	DWR UCI	R UCIP Field Study			35 °	39.345635°		
пеш	,			-122.0229	15 °	-122.022915 °		
DWR ID	17349							

#### Inspector Comment

Comment Code

FS\_ID:51760 DS\_ID:17349 EP\_NO: 9500

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/15/2016 Abandoned- WS slide gate and LS distribution box are silted over.4/16/2016 Same as last inspection. Appears abandoned and should be done so properly.4/2/2015 WS slide gate and LS distribution box are still silted over.Seems abandoned as slide gate and distribution box silted.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal irrigation and drainage pipe through the levee, 17 feet below the crown, not found in 2016. Slide gate on the waterside (WS), found in 2016. 8-inch steel pipe sleeved through the 48-inch pipe during the summer months, not found in 2016. Discharges into a concrete distribution box on the landside (LS) toe. (Automatic Board Order (ABO) issued as Permit No. 9500, 1974 - Zumwalt Orchards, Inc.). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 16.42)].

FS Date: 5/1/2017 10:42:09 AM



Waterside view: silt and debri infront of slide gate

LM Start	16.43	Rating **	С	Issue No.		70			
LM End	16.43	Issue Type +	Ma	Location *		LS			
Category	Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End			
Item	Animal Co	Animal Control			95 °	39.345695°			
itein				-122.02282	20°	-122.022820 °			
DWR ID DWR_ST0003_01_f _ 2016_70									
		Comn	nent Coc	le					

A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

The rodent holes were repaired along the landside slope.

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	16.93	Rating **	М	Issue No.		69		
LM End	16.93	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachi	ncroachments			63°	39.347263 °		
пеш				-122.015608 °		-122.015608°		
DWR ID DWR_ST0003_01_f _ 2016_69								
		Comn	nent Cod	de				
PR : Pruni	ngs							
		Inspecto	or Comm	nent				
Remove p	Remove prunings from the landside toe.							

No Photos

LM Start	16.96	Rating **	М	Issue No.		68
LM End	16.96	Issue Type +	En	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Encroach	ments	nents		12°	39.347312°
item				-122.0151	37°	-122.015137°
DWR ID	DWR_ST0	003_01_f _ 2016	6_68			

Comment Code

PR : Prunings

Inspector Comment

Remove prunings from the landside toe.

# Photo 1 of 1 : FA\_2018\_ST0003\_264\_68\_20180905\_00014.jpg



View of the prunings along the landside toe.

Photo 1 of 1: FA\_2018\_ST0003\_264\_66\_20180905\_00013.jpg

LM Start	17.42	Rating **	М	Issue No.		66	
LM End	17.42	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory		Start				End	
Item	Encroach	ments		39.3513	22°	39.351322°	
item				-122.0093	48 °	-122.009348°	
DWR ID	DWR ID DWR_ST0003_01_f _ 2016_66						
		Comn	nent Cod	de			

PR: Prunings

Inspector Comment

Remove prunings from the landside toe.



View of the prunings along the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	17.51	Rating **	М	Issue No.		65		
LM End	17.51	Issue Type +	En	Location *		LS		
Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End		
Item	Encroach	Encroachments			15°	39.352615 °		
пеш				-122.009247 ° -122.0				
DWR ID DWR_ST0003_01_f _ 2016_65								
		Comn	nent Cod	de				
PR : Pruni	ngs							
		Inspecto	or Comm	nent				
Remove prunings from the landside toe.								



View of the prunings along the landside toe.

LM Start	17.58	Rating **	М	Issue No.	186		
LM End	17.58	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCI	P LMA Respo	nsibility	39.35353	1 °	39.353531°	
пеш			onsibility 39.353531 ° 39.35	-122.009138°			
DWR ID	17329						
		Comn	nent Cod	le			

# Inspector Comment

FS\_ID:51762 DS\_ID:17329 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. Pipe had a small leak during high water and is believed to be caused by the screw gate not being fully closed before it was reburied after its

internal inspection. (DWR Sutter Yard- AFreitag)11/1/2016

Abandoned. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/18/2015 by Nor-Cal Pipeline Services. Pipe section through levee is about 93.8ft long. Inspection showed signs of rusting but no holes or other deterioration was found. WS end and slidegate were photographed, LS end was not. After the inspection pipe ends were capped and reburied until further abandonment can be achieved.4/2/2015 WS pipe end was dug up in preparation for internal camera inspection. Only steel slide gate structure found on waterside.7/2/2014 Same as last

inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 15.8 feet below the crown. Slide gate on the waterside (WS) end. Both pipe ends are silted over. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 17.6)].

FS Date: 5/1/2017 10:45:36 AM

# Photo 1 of 3 : UCIP\_FA\_2018\_51762\_47384.jpg



Landside view: overview. No pipe found.

# Levee Inspection Report By Mile - Fall 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	17.58	Rating **	М	Issue No.		186 (cont)		
LM End	17.58	Issue Type +	Ма	Location *				
Category	Supplemental			GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	onsibility	39.3535	31 °	39.353531 °		
пеш				-122.0091	38°	-122.009138°		
DWR ID	17329					·		

#### Inspector Comment

Comment Code

FS ID:51762 DS\_ID:17329 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. Pipe had a small leak during high water and is believed to be caused by the screw gate not being fully closed before it was reburied after its internal inspection. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/18/2015 by Nor-Cal Pipeline Services. Pipe section through levee is about 93.8ft long. Inspection showed signs of rusting but no holes or other deterioration was found. WS end and slidegate were photographed, LS end was not. After the inspection pipe ends were capped and reburied until further abandonment can be achieved.4/2/2015 WS pipe end was dug up in preparation for internal camera inspection. Only steel slide gate structure found on waterside.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 15.8 feet below the crown. Slide gate on the waterside (WS) end. Both pipe ends are silted over. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 17.6)]. FS Date: 5/1/2017 10:45:36 AM

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Photo 2 of 3: UCIP\_FA\_2018\_51762\_47386.jpg

Waterside view: slide gate steel structure

#### Rating \*\* Issue No 17.58 M 186 (cont) LM Start Issue Type + Location ' LM End 17.58 Ма

Photo 3 of 3: UCIP\_FA\_2018\_51762\_47385.jpg



Waterside view: burried slide gate

Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable A: Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR: Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	17.63	Rating **	М	Issue No.		96	
LM End	17.63	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
				Start		End	
Item	Encroach		39.3543	800°	39.354300°		
item				-122.009217 °		-122.009217 °	
DWR ID DWR_ST0003_01_f _ 2018_96							
		Comn	nent Cod	de			
EQ : Equip	oment						
		Inspecto	or Comm	nent			
Remove equipment from the landside toe.							

Photo 1 of 1 : FA\_2018\_ST0003\_264\_96\_20181105\_00191.jpg

View of the equipment along the landside toe.

LM Start	17.97	Rating **	М	Issue No.	63			
LM End	18.05	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Encroach	ments		39.358920°		39.359547°		
item				-122.0075	37°	-122.006293 °		
DWR ID DWR_ST0003_01_f _ 2016_63								
Comment Code								

#### EQ: Equipment

#### Inspector Comment

# Photo 1 of 1 : FA\_2018\_ST0003\_264\_63\_20180905\_00011.jpg



View of the ag equipment along the landside toe.

LM Start	18.07	Rating **	М	Issue No.		101				
LM End	18.07	Issue Type +	En	Location *	LS					
Category Earthen Levee				GPS Latitude/Longitude						
Calegory	Calegory					End				
Item	Encroach	Encroachments			92°	39.359692	0			
item				-122.0058	92°	-122.005892	٥			
DWR ID	DWR_ST0	003_01_f _ 201	3_101							
	Comment Code									

#### PR: Prunings

#### Inspector Comment

Remove the prunings from the landside toe.

# Photo 1 of 1 : FA\_2018\_ST0003\_264\_101\_20181105\_00192.jpg



View of the prunings along the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

#### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.07	Rating **	M	Issue No.		187	
LM End	18.07	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory	ory			Start		End	
Item	DWR UCI	P Field Study		39.35967	'5 °	39.359675	0
пеш				-122.00587	'9 °	-122.005879	0
DWR ID	17342						

Comment Code

Inspector Comment

FS\_ID:51764 DS\_ID:17342 EP\_NO: 14217

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/20/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/1/2016 Unable to locate. (DWR Sutter Yard-

AFreitag)6/3/2016 Unable to locate.4/2/2015 Unable to

locate. Need to contact owner to determine status and location of this

crossing, 7/2/2014 Unable to locate, 12/19/2013 Unable to locate.7/24/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 1 of 2: 2-inch asphalt coated steel gas pipeline through the levee, 2 feet below the crown. (Permit No. 14217, 1985 - Jordan Oil and Gas Company). [Additional Reference(s): DWR

Levee Log, 2002].

FS Date: 5/1/2017 10:47:34 AM

No Photos

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.07	Rating **	М	Issue No.		188		
LM End	18.07	Issue Type +	En	Location *				
Category	Suppleme	pplemental			GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.35967	5°	39.359675	0	
item				-122.00587	9°	-122.005879	0	
DWR ID	17520							

No Photos

Inspector Comment

Comment Code

FS\_ID:51765 DS\_ID:17520 EP\_NO: 14217

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/20/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/1/2016 Unable to locate. (DWR Sutter Yard-AFreitag)6/3/2016 Unable to locate.4/2/2015 Unable to locate. Need to contact owner to determine status and location of this crossing.7/2/2014 Unable to locate.12/19/2013 Unable to locate.7/24/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 2 of 2: 2-inch asphalt coated steel gas pipeline through the levee, 2 feet below the crown. (Permit No. 14217, 1985, - Jordan Oil and Gas Company). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 5/1/2017 10:48:10 AM

18.12 Rating \*\* Μ Issue No. 62 LM Start Location \* LM End 18.12 Issue Type + En LS Earthen Levee GPS Latitude/Longitude Category End Encroachments 39.359957° 39.359957 Item -122.005063 ° -122.005063 ° DWR ID DWR ST0003 01 f 2016 62 Comment Code TR: Tree or limb

Inspector Comment

Fruit trees at the landside toe.

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.19	Rating **	М	Issue No.		189
LM End	18.19	Issue Type +	En	Location *		
Category	Supplemental				atitud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.3599	83°	39.359983°
item			-122.0037	32°	-122.003732°	
DWR ID	17343					

# Inspector Comment

Comment Code

FS\_ID:51766 DS\_ID:17343 EP\_NO: 9502

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing.4/2/2015 Same as last inspection. Vertical pump on bank not found as bank is not accessible. An abandoned electrical switch found on waterside. Landside distribution box is filled with debris and soil. Crossing appears abandoned and should be verified as having been done so properly.

7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal irrigation pipe through the levee, 18 feet below the crown. Vertical pump on the waterside (WS) bank, not found in 2015. Slide gate in a concrete box on the WS toe. Pipe discharges into a concrete distribution box on the landside (LS) toe. Pole on the WS shoulder and an abandoned electrical switch found on the WS. (Automatic Board Order (ABO) issued as Permit No. 9502, 1974 - Coffman). (Additional Related Permit(s): Permit No. 11540, 1976 - Wilearlee Walnuts). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.22)].
FS Date: 5/1/2017 10:49:09 AM

 LM Start
 18.19
 Rating \*\*
 M
 Issue No.
 189 (cont)

 LM End
 18.19
 Issue Type +
 En
 Location \*



Waterside view: overview of gate riser

Photo 2 of 3: UCIP\_FA\_2018\_51766\_47392.jpg



Waterside view: inside gate riser

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.19	Rating **	M	Issue No.		189 (cont)
LM End	18.19	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.35998	3°	39.359983°
пеш			-122.00373	2°	-122.003732 °	
DWR ID	17343					

# Comment Code

Inspector Comment

FS\_ID:51766 DS\_ID:17343 EP\_NO: 9502

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing.4/2/2015 Same as last inspection. Vertical pump on bank not found as bank is not accessible. An abandoned electrical switch found on waterside. Landside distribution box is filled with debris and soil. Crossing appears abandoned and should be verified as having been done so properly.

7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal irrigation pipe through the levee, 18 feet below the crown. Vertical pump on the waterside (WS) bank, not found in 2015. Slide gate in a concrete box on the WS toe. Pipe discharges into a concrete distribution box on the landside (LS) toe. Pole on the WS shoulder and an abandoned electrical switch found on the WS. (Automatic Board Order (ABO) issued as Permit No. 9502, 1974 - Coffman). (Additional Related Permit(s): Permit No. 11540, 1976 - Wilearlee Walnuts). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M

Manual 136, March 1960 (HLM 18.22)].

FS Date: 5/1/2017 10:49:09 AM

Photo 3 of 3: UCIP\_FA\_2018\_51766\_47391.jpg



Waterside view: concrete gate riser

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.20	Rating **	М	Issue No.		190
LM End	18.20	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.35994	8 °	39.359948 °
пеш				-122.00359	1 °	-122.003591 °
DWR ID	17344					

Comment Code

Inspector Comment

FS\_ID:51767 DS\_ID:17344 EP\_NO: 12930A Repair Type: Non-Urgent Crossing Status: Not Found

Crossing Status: Not Found UCIP Comments: 4/20/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/1/2016 Unable to locate. (DWR Sutter Yard-AFreitag)6/3/2016 Unable to locate.4/2/2015 Unable to locate. Need to contact owner to determine status and location of this crossing.7/2/2014 Unable to locate.12/19/2013 Unable to locate.7/24/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 3.5-inch asphalt coated steel gas pipeline through the levee, 2 feet below the crown. (Permit No. 12930-A, 1980 - Jordan Oil and Gas Co.). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 5/1/2017 10:50:09 AM

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.61	Rating **	A/W	Issue No.		191	
LM End	18.61	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.3628	66°	39.362866 °	
пеш				-121.9979	93 °	-121.997993 °	
DWR ID	DWR ID 17345						
Comment Code							

#### Inspector Comment

FS\_ID:51770 DS\_ID:17345 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe is 155ft in total length and the inpsection showed some minor rusting but no holes or other deformations were found. Pipe is still used by the landowner for irrigation and the sloughing near the WS end was repaired and rocked to prevent future slloughing or erosion.4/14/2016 Sloughing repaired by Sutter Yard with rock revetment.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.Sloughing at outlet and levee slope is damaged due to sloughing.7/2/2014 It is not an abandoned crossing. Sloughing at outlet and levee slope is damaged due to sloughing.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 20 feet below the crown. Slide gate at the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.65)]. FS Date: 5/1/2017 10:52:46 AM

 LM Start
 18.61
 Rating \*\*
 A/W
 Issue No.
 191 (cont)

 LM End
 18.61
 Issue Type +
 Ma
 Location \*



Waterside view: overview of sliding gate structure

#### Photo 2 of 3: UCIP\_FA\_2018\_51770\_47398.jpg



Waterside view: outlet pipe with concrete headwall and floor appron.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence C: Corrected AW: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable C: Corrected Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.61	Rating **	A/W	Issue No.		191 (cont)
LM End	18.61	Issue Type +	Ма	Location *		
Category Supplemental GPS L			Supplemental			e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.36286	6°	39.362866 °
пеш					3°	-121.997993 °
DWR ID	17345					·

# Inspector Comment

Comment Code

FS\_ID:51770 DS\_ID:17345 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe is 155ft in total length and the inpsection showed some minor rusting but no holes or other deformations were found. Pipe is still used by the landowner for irrigation and the sloughing near the WS end was repaired and rocked to prevent future slloughing or erosion.4/14/2016 Sloughing repaired by Sutter Yard with rock revetment.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.Sloughing at outlet and levee slope is damaged due to sloughing.7/2/2014 It is not an abandoned crossing. Sloughing at outlet and levee slope is damaged due to sloughing.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 20 feet below the crown. Slide gate at the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.65)].

FS Date: 5/1/2017 10:52:46 AM

# Photo 3 of 3 : UCIP\_FA\_2018\_51770\_47403.jpg



Waterside view: sloughing at outlet pipe

# Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.70	Rating **	A/W	Issue No.		192
LM End	18.70	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.36406	7°	39.364067°
пеш			-121.99779	2°	-121.997792°	
DWR ID	17346					

# Comment Code Inspector Comment

FS\_ID:51771 DS\_ID:17346 EP\_NO: 9503

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. 129.5 ft (starting from the WS end) was inspected to get get us through the levee prism but the LS end was never found. Pipe showed no signs of rust or damage.4/14/2016 Inlet structure still filled with soil.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.According to local people, the crossing is functional. The gap between 8-inch and 24-inch pipes is grouted with cement. Inlet structure is filled with soil.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. 8-inch steel pipe sleeved through the 24-inch pipe. Annular space cement grouted. Slide gate at the waterside (WS) toe. Concrete inlet box on the landside (LS). (24-inch pipe [HLM 18.74] authorized under Automatic Board Order (ABO) issued as Permit No. 9503, 1974 - Baird). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.74)].

FS Date: 5/1/2017 10:53:44 AM

LM Start	18.70	Rating **	A/W	Issue No.	192 (cont)
LM End	18.70	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP\_FA\_2018\_51771\_47442.jpg



Waterside view: overview of slide gate structure

Photo 2 of 3: UCIP\_FA\_2018\_51771\_47441.jpg



Waterside view: 8-inch pipe inside 24-inch CMP

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	18.70	Rating **	A/W	Issue No.		192 (cont)
LM End	18.70	Issue Type +	Ма	Location *		
Category	Supplemental			GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.36406	67°	39.364067 °
пеш				-121.99779	92 °	-121.997792°
DWR ID	17346					

#### Inspector Comment

Comment Code

FS\_ID:51771 DS\_ID:17346 EP\_NO: 9503

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. 129.5 ft (starting from the WS end) was inspected to get get us through the levee prism but the LS end was never found. Pipe showed no signs of rust or damage.4/14/2016 Inlet structure still filled with soil.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.According to local people, the crossing is functional. The gap between 8-inch and 24-inch pipes is grouted with cement. Inlet structure is filled with soil.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. 8-inch steel pipe sleeved through the 24-inch pipe. Annular space cement grouted. Slide gate at the waterside (WS) toe. Concrete inlet box on the landside (LS). (24-inch pipe [HLM 18.74] authorized under Automatic Board Order (ABO) issued as Permit No. 9503, 1974 - Baird). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.74)].

FS Date: 5/1/2017 10:53:44 AM

Photo 3 of 3 : UCIP\_FA\_2018\_51771\_47440.jpg



Waterside view: 8-inch pipe and drain gate

## Levee Inspection Report By Mile - Fall 2018

#### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.19	Rating **	A/W	Issue No.		193
LM End	19.19	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.37003	1°	39.370031 °
item				-121.99645	8°	-121.996458°
DWR ID	17347					

#### Inspector Comment

Comment Code

FS ID:51773 DS\_ID:17347 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- plugged. (DWR Sutter Yard-AFreitag)11/1/2016 Abandoned/plugged. (DWR Sutter Yard-AFreitag)6/16/2016 Internal camera inspection was done on 11/19/2015 by Nor-Cal Pipeline Servies. Pipe was inspected starting from the WS end and inspected upto the grout plug that is 13.7ft into the pipe. Pipe was then capped and reburied until further abandonment can be achieved.4/2/2015 WS end of pipe was dug up in preparation for internal camera inspection. Only steel slide gate structure found on WS.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD STRUCT DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 21.7 feet below the crown. Slide gate at the waterside (WS) toe. Pipe grouted on the WS end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 19.24)].

FS Date: 5/1/2017 10:55:06 AM

LM Start	19.19	Rating **	A/W	Issue No.	193 (cont)
LM End	19.19	Issue Type +	Ма	Location *	



Waterside view: overview of abandoned slide gate structure

#### Photo 2 of 3: UCIP\_FA\_2018\_51773\_47446.jpg



Landside view: overview (no pipes)

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.19	Rating **	A/W	Issue No.		193 (cont)	
LM End	19.19	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lati	tuc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	nsibility	39.37003	ı °	39.370031	0
пеш				-121.99645	3°	-121.996458	٥
DWR ID	17347						

#### Inspector Comment

Comment Code

FS\_ID:51773 DS\_ID:17347 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- plugged. (DWR Sutter Yard-AFreitag)11/1/2016 Abandoned/plugged. (DWR Sutter Yard-AFreitag)6/16/2016 Internal camera inspection was done on 11/19/2015 by Nor-Cal Pipeline Servies. Pipe was inspected starting from the WS end and inspected upto the grout plug that is 13.7ft into the pipe. Pipe was then capped and reburied until further abandonment can be achieved.4/2/2015 WS end of pipe was dug up in preparation for internal camera inspection. Only steel slide gate structure found on WS.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 21.7 feet below the crown. Slide gate at the waterside (WS) toe. Pipe grouted on the WS end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 19.24)].

FS Date: 5/1/2017 10:55:06 AM

# Photo 3 of 3 : UCIP\_FA\_2018\_51773\_73781.jpg



WS pipe end and screw gate

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.55	Rating **	М	Issue No.		194
LM End	19.55	Issue Type +	Ма	Location *		
Category	Suppleme	GPS La	titud	le/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.37522	1°	39.375221 °
пеш				-121.99587	'8	-121.995878°
DWR ID	17487					

# Inspector Comment

Comment Code

FS ID:51775 DS\_ID:17487 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned.(DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing.4/2/2015 Same as last inspection. Slide Gate WS not found. An abandoned pump and steel pipe found on WS. A 6 ft x 8 ft concrete distribution box with a CMP found on LS. Box filled with soil. An abandoned crossing.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection. FIELD STRUCT DESC: \*ABANDONED\* 36-inch corrugated metal

drainage pipe through the levee, invert 21.7 feet below the crown. Abandoned pump and steel pipe found on the waterside (WS). 6 foot by 8 foot concrete distribution box with the 36-inch corrugated metal pipe found on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 136, March 1960 (HLM 19.61)].

FS Date: 5/1/2017 10:56:50 AM

LM Start	19.55	Rating **	М	Issue No.	194 (cont)
LM End	19.55	Issue Type +	Ma	Location *	



Waterside view: overview

#### Photo 2 of 3: UCIP\_FA\_2018\_51775\_47448.jpg



Waterside view: abandoned and ruined pipe

CR : Crown

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.55	Rating **	М	Issue No.		194 (cont)
LM End	19.55	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS Lati	tuc	le/Longitude	
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.37522	1°	39.375221°
пеш				-121.99587	3°	-121.995878°
DWR ID	17487					

# Inspector Comment

Comment Code

FS\_ID:51775 DS\_ID:17487 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned.(DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing.4/2/2015 Same as last inspection. Slide Gate WS not found. An abandoned pump and steel pipe found on WS. A 6 ft x 8 ft concrete distribution box with a CMP found on LS. Box filled with soil. An abandoned crossing.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection. FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, invert 21.7 feet below the crown.

FIELD\_STRUCT\_DESC: "ABANDONED" 36-inch corrugated metal drainage pipe through the levee, invert 21.7 feet below the crown. Abandoned pump and steel pipe found on the waterside (WS). 6 foot by 8 foot concrete distribution box with the 36-inch corrugated metal pipe found on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 136, March 1960 (HLM 19.61)].

FS Date: 5/1/2017 10:56:50 AM

#### Photo 3 of 3: UCIP\_FA\_2018\_51775\_47453.jpg



Waterside view: abandoned and ruined pipe

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.97	Rating **	М	Issue No.		Issue No.		Issue No. 195		195
LM End	19.97	Issue Type +	En	Location *						
Category Supplemental				GPS Latitude/Longitude						
Calegory				Start		End				
Item	DWR UCIP Field Study			39.3805	01°	39.380501 °				
item					46°	-121.993546 °				
DWR ID	17370					·				

# Inspector Comment

Comment Code

FS\_ID:51776 DS\_ID:17370 EP\_NO: 9496

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing4/2/2015 Same as last inspection. Only one pump found on WS. An abandoned surge box found on WS and pipe is grouted with cement. Two 16-inch steel pipe found on pump station along with two electrical conduits. A concrete distribution box found on LS with 20-inch CMP. Appears abandoned crossing.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 20-inch corrugated metal irrigation pipe through the levee, 19.8 feet below the crown. (Not 24-inch pipe, as stated in the O&M Manual, Automatic Board Order, and Levee Log). Two vertical pumps on a pile structure on the waterside (WS) bank (one pump found in 2015). Slide gate in a concrete surge box on the waterside (WS) berm. Discharges into a concrete distribution box on the landside (LS) across the county road. Switch board on the platform on the WS bank. (Automatic Board Order (ABO) issued as Permit No. 9496, 1974 - Womble). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 20.05)].

FS Date: 5/1/2017 10:57:25 AM

LM Start	19.97	Rating **	М	Issue No.	195 (cont)
LM End	19.97	Issue Type +	En	Location *	



Waterside view: overview

Photo 2 of 3: UCIP\_FA\_2018\_51776\_47457.jpg



Waterside view: gate riser with slide gate

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	10/10/2018 10/10/2018	Bob Duffey

LM Start	19.97	Rating **	М	Issue No.		195 (cont)
LM End	19.97	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCIP Field Study			39.38050 <sup>-</sup>	°	39.380501°
пеш			-121.993546	°	-121.993546°	
DWR ID	17370					·

# Inspector Comment

Comment Code

FS\_ID:51776 DS\_ID:17370 EP\_NO: 9496

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing4/2/2015 Same as last inspection. Only one pump found on WS. An abandoned surge box found on WS and pipe is grouted with cement. Two 16-inch steel pipe found on pump station along with two electrical conduits. A concrete distribution box found on LS with 20-inch CMP. Appears abandoned crossing.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 20-inch corrugated metal irrigation pipe through the levee, 19.8 feet below the crown. (Not 24-inch pipe, as stated in the O&M Manual, Automatic Board Order, and Levee Log). Two vertical pumps on a pile structure on the waterside (WS) bank (one pump found in 2015). Slide gate in a concrete surge box on the waterside (WS) berm. Discharges into a concrete distribution box on the landside (LS) across the county road. Switch board on the platform on the WS bank. (Automatic Board Order (ABO) issued as Permit No. 9496, 1974 - Womble). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 20.05)].

FS Date: 5/1/2017 10:57:25 AM

# Photo 3 of 3: UCIP\_FA\_2018\_51776\_47456.jpg



Waterside view: abandoned pipe with cement grouting

# **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles
Unit No. 02 Colusa Bypass	Right	2.20

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	3/7/2018 - 3/7/2018		10/25/2018 - 10/25/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Bryan Reniff Sutter Maintenance Yard		Bryan Reniff Sutter Maintenance Yard	

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

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The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Colusa Bypass	Right	2.20	10/25/2018 10/25/2018	Bob Duffey

LM Start	0.02	Rating **	М	Issue No.		1	
LM End	0.02	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category			Start		End		
Item	Vegetation			39.2320	58°	39.232058°	
item				-121.9955	14°	-121.995514°	
DWR ID	DWR_ST00	003_02_s _ 201	2_1				
		Comn	nent Cod	de			
V4 : Elderl	perries are	blocking visib	ility and	flood fight	сара	bility.	
Inspector Comment							

No Photos

LM Start	0.37	Rating **	Α	Issue No.		3	
LM End	0.37	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Long			
Calegory	sgory		Start			End	
Item	Vegetation			39.231415°		39.231415°	
item				-121.98906	60°	-121.989060 °	
DWR ID	DWR_ST00	003_02_f _ 2018	3_3				
Comment Code							
V1 : Control annual grass and weeds on the levee slopes and							

easements.

#### Inspector Comment

The vegetation was burned off of both slopes.

#### Photo 1 of 1: FA\_2018\_ST0003\_265\_3\_20181102\_00004.jpg



View of no vegetation on both slopes.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Colusa Bypass	Right	2.20	10/25/2018 10/25/2018	Bob Duffey

LM Start	1.20	Rating **	М	Issue No.		12
LM End	1.20	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	egory		Start		End	
Item	DWR UCI	DWR UCIP Field Study			6°	39.229526°
пеш			-121.97568	6°	-121.975686°	
DWR ID	17531					·

#### Inspector Comment

Comment Code

FS\_ID:49161 DS\_ID:17531 EP\_NO: 13534

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/3/2016 Crossing appears to be in good condition.4/6/2015 Same as last inspection. May need to add more substantial gasline markers.7/7/2014 Same as last

inspection.12/19/2013 Same as last inspection.7/22/2013 Same as

last inspection.

FIELD\_STRUCT\_DESC: 2.5-inch asphalt coated steel gas pipeline through the levee, 2.5 feet below the crown. A gas line marker found on the landside (LS). (Permit No. 13534, 1982 - Texaco, Incorporated). [Additional Reference(s): DWR Levee Log, 2002].

FS Date: 6/16/2016 10:00:15 AM

 LM Start
 1.20
 Rating \*\*
 M
 Issue No.
 12 (cont)

 LM End
 1.20
 Issue Type +
 En
 Location \*



Landside view: overview gasline indicator

#### Photo 2 of 3: UCIP\_FA\_2018\_49161\_47479.jpg



Landside view: overview gasline indicator

# Levee Inspection Report By Mile - Fall 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Colusa Bypass	Right	2.20	10/25/2018 10/25/2018	Bob Duffey

LM Start	1.20	Rating **	М	Issue No.		12 (cont)	
LM End	1.20	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP Field Study			39.2295	26°	39.229526°	
пеш				-121.975686°		-121.975686°	
DWR ID	17531					·	

#### Inspector Comment

Comment Code

FS\_ID:49161 DS\_ID:17531 EP\_NO: 13534

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/3/2016 Crossing appears to be in good condition.4/6/2015 Same as last inspection. May need to add more substantial gasline markers.7/7/2014 Same as last

inspection.12/19/2013 Same as last inspection.7/22/2013 Same as

last inspection.

FIELD\_STRUCT\_DESC: 2.5-inch asphalt coated steel gas pipeline through the levee, 2.5 feet below the crown. A gas line marker found on the landside (LS). (Permit No. 13534, 1982 - Texaco, Incorporated).

[Additional Reference(s): DWR Levee Log, 2002].

FS Date: 6/16/2016 10:00:15 AM

Photo 3 of 3: UCIP\_FA\_2018\_49161\_47478.jpg



Landside view: gasline indicator

#### **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles
Unit No. 03 Colusa Bypass	Left	2.29

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	3/13/2018 - 3/13/2018		10/25/2018 - 10/25/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Bryan Reniff Sutter Maintenance Yard		Bryan Reniff Sutter Maintenance Yard	

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

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# **Levee Inspection Report By Mile - Fall 2018**

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Colusa Bypass	Left	2.29	10/25/2018 10/25/2018	Bob Duffey

LM Start	0.67	Rating **	Α	Issue No.		1
LM End	0.67	Issue Type +	Ma	Location *		LS
Earthen Levee				GPS La	atitud	e/Longitude
Category				Start		End
Item	Vegetation				82°	39.237682°
item				-121.981938 °		-121.981938°
DWR ID DWR_ST0003_03_f _ 2018_1						
		Comn	nent Cod	de		
V1 : Control annual grass and weeds on the levee slopes and easements.						
Inspector Comment						
The vegetation was burned off of both slopes.						



View of no vegetation on both slopes.

LM Start	1.94	Rating **	М	Issue No.		10		
LM End	1.94	Issue Type +	Ma	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
Calegory				Start		End		
Item	Vegetation		39.2448	88°	39.244888 °			
пеш				-121.965595 °		-121.965595 °		
DWR ID DWR_ST0003_03_s _ 2012_10								

Comment Code

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

LM Start	2.13	Rating **	М	Issue No.	2		
LM End	2.13	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetation			39.2449	25 °	39.244925	0
пеш				-121.962072 °		-121.962072	0
DWR ID DWR_ST0003_03_s _ 2015_2							
Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

Locatio			
LS : La	nd Side	N/A: Not	Applicabl
10/0 - 10/	ALL CIDA		

A : Acceptable M : Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

#### **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles
Unit No. 04 Moulton Bypass	Right	0.30

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	4/19/2018 - 4/19/2018		10/10/2018 - 10/10/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Bryan Reniff Sutter Maintenance Yard		Bryan Reniff Sutter Maintenance Yard	

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# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Moulton Bypass	Right	0.30	10/10/2018 10/10/2018	Bob Duffey

		II.				
LM Start	0.10	Rating **	Α	Issue No.		1
LM End	0.10	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Vegetatio	n		39.3377	'63 °	39.337763°
пеш				-122.020342 °		-122.020342°
DWR ID	DWR_ST0003_04_f _ 2018_1					
Comment Code						
V1 : Contreasements		grass and wee	eds on th	e levee slo	pes a	and
Inspector Comment						
The vegetation has been removed from both slopes.						

Photo 1 of 1 : FA\_2018\_ST0003\_267\_1\_20181105\_00001.jpg

View of no vegetation on both slopes.

#### **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles
Unit No. 05 Moulton Bypass	Left	2.19

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	4/19/2018 - 4/19/2018		10/10/2018 - 10/10/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Bryan Reniff Sutter Maintenance Yard		Bryan Reniff Sutter Maintenance Yard	

#### **Summer & Winter Inspections**

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# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 05 Moulton Bypass	Left	2.19	10/10/2018 10/10/2018	Bob Duffey

LM Start	0.35	Rating **	Α	Issue No.		2
LM End	0.35	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Vegetatio	า		39.3432	42°	39.343242°
пеш				-122.016578°		-122.016578°
DWR ID DWR_ST0003_05_f _ 2018_2						
Comment Code						
V1 : Control annual grass and weeds on the levee slopes and easements.						
Inspector Comment						
The vegetation has been removed from both slopes.						



View of no vegetation on both slopes.

LM Start	0.71	Rating **	М	Issue No.		5	
LM End	0.71	Issue Type +	En	Location *	WS		
Catagonia Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Encroachments			39.3411	67°	39.341167°	
пеш			-122.0104	12°	-122.010412°		
DWR ID	DWR_ST00	8_5					
Comment Code							
PR : Prunings							

Inspector Comment Remove the prunings from the waterside toe.

Photo 1 of 1: FA\_2018\_ST0003\_268\_5\_20180905\_00002.jpg



View of the prunings along the waterside toe.

LM Start	1.59	Rating **	М	Issue No.		1	
LM End	2.18	Issue Type +	En	Location *		CR	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	Encroachments			39.3359	53°	39.336852°	
item				-121.99580	07°	-121.984934 °	
DWR ID	DWR_ST0003_05_s _ 2016_1						
Comment Code							
FE : Fence	)						

Inspector Comment



View of the fence obstructing access.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement